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THE

BRITISH

# FARMER'S MAGAZINE.

NEW SERIES.

Agriculture not only gives riches to a nation, but the only riches she can call her own — DR. JOHNSON.

VOL. LXXVIII.



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# THE FARMER'S MAGAZINE.

JANUARY, 1879.

PLATE.

## DESIDERATUM.

A sporting writer of few years ago, when lamenting over the days that are gone, asks "Where is the old farmer, who was to be found with his pipe in the settle of the ale-house, and his son, the good looking, civil lad of eighteen in fustian and leather leggings, who was to be seen at the covert-side on the almost perfect four-year-old hunter that was to be bought for forty pounds?" Where? Why gone to ground with Sir Timothy Thicket, Squire Bumper, the mottled-faced stage coachman, and all his wrappers, the jolly waggoner with his broad brimmed hat and the still broader wheels of his waggon, and the parson who was reckoned rich on forty pounds a year. The desideratum of the day, now all the world and his wife have taken to the chase, is a weight-carrying hunter, and our plate represents a fox-hunting agriculturist quietly putting a four-year old, up to double his weight

over a fence, a nag for which he would ask, not forty pounds, but two or three hundred, or more of a "man possessed of aught to give," although he stands but a poor chance of catching the man on a grey going like the fire-king on his hot copper filly, while the swell behind appears to be pounded, as he evidently is, on a nag with a temper like that of the "missus, for if she will she will, but if she won't she won't, and there's an end on't." But a run, like life, is full of ups and downs; so, up or down, don't let us forget that we are but men, and how soon we may want aid, for we may be sailing beautifully over one field and in the next playing the part of Richard, and shouting "My horse! my horse! Half a pint of beer for any one that will catch my horse! Have mercy, Johnny, I meant a pot!"

## AGRICULTURAL SOCIETIES.

### ROYAL OF ENGLAND.

MONTHLY COUNCIL, Wednesday, December 11, 1878.

Present:—H.R.H. the Prince of Wales, K.G. (President), in the chair; the Duke of Bedford, the Duke of Richmond and Gordon, K.G., Earl Cathcart, the Earl of Lichfield, Earl Spencer, K.G., General Viscount Bridport, Lord Cheaham, Lord Vernon, the Hon. W. Egerton, M.P., Sir A. K. Macdonald, Bart., Sir Watkin W. Wynn, Bart., M.P., Sir Brandreth Gibbs, Mr. Aveling, Mr. Bowly, Mr. Cantrell, Mr. Chandos-Pole-Gell, Mr. Dent, Mr. Druce, Mr. Edmonds, Mr. Evans, Mr. Frankish, Mr. Hemsley, Mr. C. Howard, Mr. J. Howard, Mr. Bowen Jones, Col. Kingscote, C.B., M.P., Mr. Leeds, Mr. McIntosh, Mr. Martin, Mr. Odams, Mr. Pain, Mr. Randell, Mr. Ransome, Mr. Russell, Mr. Sanday, Mr. Sheraton, Mr. Shuttleworth, Mr. Stratton, Mr. Torr, M.P., Lieut.-Col. Picton Turbervill, Mr. Wakefield, Mr. Wells, Mr. Whitehead, Mr. Jacob Wilson, Professor Brown, Prof. Simonds, and Dr. Voelcker.

The following new members were elected:—

Armistage, Elijah, of High House, near Kead l.  
Beart, Frederick Robert, of Godmauchester, Huntingdon.  
Bell, Geo. Graham, of 11, Pall Mall East, London, S.W.  
Bennett, Joseph, of Down House Farm, Cam., Dursley.

OLD SERIES.

Blundell, Edward, of Birchmoor, Woburn.  
Brain, William, of Great Winchcomb.  
Brandreth, Henry C. G., of Houghton Hall, Dunstable.  
Burrell, J. F., of Manor House, Frimley, Farnborough Station.  
Cattley, William, of Northbrook, Godalming.  
Cazalet, Edward, of Fairlaw, Tonbridge, Kent.  
Colville, Hugh Ker, of 4, Orington Gardens, Brompton London, S.W.  
Crowhurst, Charles, of Maidstone.  
Crump, Henry Tilston, of White Cross Street, Union Street, Borough, London, S.E.  
Davids, Charles Henry, of Bodicote Lawn, Benbury.  
Duppa, George, of Hollingbourne House, Maidstone.  
Fortescue, Captain Cyril D., of Boconnor, Lostwithiel.  
Freeman, James, of Otford, Sevenoaks.  
Gibbs, Thomas B., of 50, Clissold Road, Stoke Newington, London, N.  
Griffith, George, of Wolverhampton Road, Stafford.  
Hall, Collinson, of Dyrchley, Brentwood.  
Harding, Joseph, of Moorend Estate, Slimbridge, Stonehouse.  
Harris, George, of Court House Farm, Cam, Dursley.  
Hogg, Robert, LL.D., of 99, St. George's Road, Eccleston Square, London, S.W.  
Ind, Edward, of Great Warley, Brentwood.  
Kelling, F. J., of The Park, Coven, Wolverhampton.  
Lewis, Charles E., of St. Pirre, Chepstow.

B

VOL. LXXXV.—No. 1.

Lismore, Viscount, of Shanbally, Clogheen, Ireland.  
 Myatt, James, of Enson Moor, Stone, Staffs.  
 Pound, Philip Giles, of Horsham, Essex.  
 Ray, Charles, of Foxearth, Long Melford.  
 Rigby, Thomas, of Lea Old Hall, Preston.  
 Rolfe, George Carter, of Plumpton, Wye, Ashford, Kent.  
 Shroeter, Charles W., of Tedfold, Billingham, Sussex.  
 Shanks, Frederick, of 4, Great Queen Street, London, W.C.  
 Smith, George, of Paddehurst, Crawley.  
 Stubbs, John, of Langrish Farm, Petersfield.  
 Stunt, Warwick, of Hoo, Rochester.  
 Thomas, William, of Sully, Cardiff.  
 Tower, Christopher J. H., of Weald Hall, Brentwood.  
 Wigan, Frederick, of 15, Southwark Street, London, S.E.  
 Wigan, Lewis D., of Oakwood, Maidstone.  
 Wigg, John Stone, of Stoneleigh, Tumbidge Wells.  
 Wilkin, A. C., of Tiptree Heath, Kelvedon.  
 Woodward, John, of Uckington, Cheltenham.  
 Wortley, N. W., of Kiddington, Uppingham.

## FINANCES.

Mr. RANDELL presented the report, from which it appeared that the Secretary's receipts during the past month had been examined by the Committee, and by Messrs. Quilter, Ball, and Co., the Society's accountants, and found correct. The balance in the hands of the bankers on November 30th was £1,942 19s. 10d.

The Committee had met nine times, and made nine reports; they recommended that Mr. Frankish be added to the Committee. This report was adopted, and Mr. D. R. Davies was added to the Committee.

## JOURNAL.

Mr. DENT (Chairman) reported that gentlemen invited had accepted office as Judges of Sewage Farms. Two entries had been received in each of the two classes of Market Gardens, and three entries in the class for Market Gardens—viz. :—

SECTION II.—Market Gardens within a radius of twenty miles from the Mansion House.

Class 3.—Market Gardens exceeding ten and not exceeding fifty acres in extent. First prize, £50; second, £25; third, £10.

William Gay, Corbetatye, Romford.

William John Gay, Axe-street, Barking.

Class 4.—Market Gardens above fifty acres in extent. First prize, £50; second, £25; third, £10.

John Lancaster, Vine House, Canning Town, E.

Thomas Patch, Faircross, Barking.

SECTION III.—Market-garden Farms, situated in one of the five Metropolitan Counties—viz., Kent, Surrey, Middlesex, Hertford, and Essex; or if situated in any other county, such farms to be within a radius of fifty miles from the Mansion House.

Class 5.—Market-garden farms on which market-garden crops alternate with corn crops, above one hundred acres in extent. First prize, £50; second, £25; third, £10.

William Wallis Glenny, of Cecil House, Barking.

Henry Swann (Manager to Trustees of the late John C. Gurnett), Rainham, Essex.

Major Walter, Slinsfield, Horsham.

The Committee had met nine times and made nine reports, and they recommended that the following be the Committee for the ensuing year:—Earl Cathcart, Sir W. E. Welby-Gregory, Bart., Sir M. White Ridley, Bart., Mr. Chandos-Pole-Gell, Mr. J. D. Dent, Mr. W. Frankish, Mr. J. Hemaley, Mr. J. Howard, Mr. J. Bowen Jones, Colonel Kingscote, Mr. R. C. Ransome, Lieutenant-Colonel Turbervill, Mr. William Wells, Mr. C. Whitehead, Mr. Wise.

This report was adopted.

## CHEMICAL.

Mr. WELLS (Chairman) reported that Mr. Christopher, the Society's surveyor, had attended the Committee, and expressed his belief that the laboratory would be finished and ready for use by the 1st of January, 1879. Dr. Voelcker had read to the Committee his annual report,

and the Committee recommended that it be published as usual in the *Journal*. The following is an abstract of the report:—

Seven hundred and twenty-four samples of artificial manures, oilcakes, seeds, &c., were sent for analysis by members of the Society between the period of December, 1877, and December, 1878, which number exceeds that of last year by eighty-two.

Speaking of nitrate of soda, Dr. Voelcker called attention to its use as a manure for mangels, and made reference to an adulteration case of nitrate of soda, the buyer of which was allowed by the seller to deduct no less than £62 from the bill, which amounted to £162.

Of the forty-one samples of bone-dust analysed in 1878 by the consulting chemist, most were found pure, but some purchased as raw bone-dust consisted of a mixture of raw and steamed or glue-makers' refuse bones.

As usual, a number of samples of drinking water on analysis proved to be contaminated more or less with injurious drainage products, and some were totally unfit for drinking purposes.

Fourteen poisoning cases were brought under the notice of the consulting chemist. In one of these cases arsenic was discovered in the contents of the stomach of a pig, a number of which animals had died suddenly, and were suspected to have been poisoned. In another instance castor oil beans were found in a compound feeding cake, which did injury to cattle.

Notwithstanding the repeated warnings not to give to stock stale and mouldy cakes or corn, Dr. Voelcker had received in the past season several cakes, which were alleged to have killed or seriously injured the health of sheep and oxen, and in which no mineral or organic poison capable of being detected by analysis could be found; and he referred specially to the case of a mouldy and stale compound feeding cake which when given in the small proportion of five ounces daily per sheep, had caused the death of two sheep by irritation of the coats of the stomach.

Allusion was made in the report to Black Sea rape-cake, which consists largely of the siftings from foul linseed and other obnoxious seeds, and contains but little rapeseed, and much dirt, and a great variety of we d-seeds.

Dr. Voelcker, since April, had paid thirteen visits to the experimental field and Crawley Mill Farm.

The following papers had been contributed by Dr. Voelcker to the *Journal* of the Royal Agricultural Society for 1878:—

1. On Bat's Guano.

2. Annual Report for 1877.

3. Joint Report with Mr. Lawes on the Field and Feeding Experiment, at Woburn.

4. The Influence of Chemical Discoveries on the Progress of English Agriculture.

Dr. Voelcker's quarterly report, containing only one case of adulteration, had been received, and ordered to be printed for consideration as usual. The Committee recommended that in the revised schedule of "Members' Privileges" the words "and an estimate of its value" be altered as follows, at the end of Nos. 3, 4, and 5:—"In all cases where the prices at which artificial manures or cakes have been bought, or are offered for sale, has been previously ascertained, Dr. Voelcker's estimate of the money value of such articles will be given." They also recommended that No. 41 run as follows:—"Personal consultation with the consulting chemist. The usual hours of attendance for the Director (Monday excepted) will be from 11 to 2; but, to prevent disappointment, it is suggested that members desiring to hold a consultation with the Director should write to make an appointment." The Committee had met 9 times and made 9 reports, and they recommended that the following constitute the Committee for the ensuing year:—Duke of Bedford, Earl of Lichfield, Lord Vernon, Sir A. K. Macdonald, Bart., Sir W. E. Welby-Gregory, Bart., Mr. J. H. Arkwright, Mr. T. Aveling, Mr. W. Carruthers, Mr. J. D. Bent, Mr. W. J. Edmonds, Mr. Charles Howard, Mr. J. Bowen Jones, Mr. J. B. Lawes, Lieut.-Col. Turbervill, Mr. W. H. Wakefield, Mr. R. A. Warren, Mr. Wm. Wells, Mr. Charles Whitehead, Dr. Voelcker. This report was adopted.

## SEEDS, AND PLANT DISEASES.

Mr. WHITEHEAD (Chairman) presented the following annual report of the consulting botanist:—

"The samples of seeds which have been examined by me during the past year have been on the whole, satisfactory. The worst that have passed through my hands are samples of prominent grass, several of which were extremely bad from the mixture of worthless and injurious weeds, and from the quantity of husks, fragments of straw, and other impurities. Though the reports on these specimens saved members of the Society who submitted them for examination from imposition, and led to arrangements with the dealers which were satisfactory to them individually, I failed to secure advantage to the Society at large, from the refusal of the members to communicate the names of the dealers.

"Information has been supplied by me to members as to the nature of the weeds infesting their ground, and the best means of eradicating them; the treatment of different soils in relation to the life of the plants cultivated on them; and the character of the permanent pastures fitted for particular soils; and other subjects.

"The attention of the botanist has been directed to the subject of improving our cultivated cereals, and after a report submitted to the Committee, proposals were adopted for offering prizes for new varieties of seed, which have been approved by the Council and been published.

"The alarm created in 1877 by the threatened appearance of the Colorado beetle happily did not reappear during the past year. This was no doubt largely due to the action of the Society in distributing so extensively accurate information and coloured figures of the beetle. The inquiries during the year in relation to insects referred chiefly to the root-eating larvae of click beetles (wire worms), and of the dusky long-legs, which are incorrectly called wire worms. These latter were extremely abundant in some districts of England and Ireland during the past summer, and proved most injurious to the corn. Information was supplied to the members in reference to these and other insect pests by the experienced entomologist who has undertaken this department."

The Committee had met four times, and made four reports. They recommended that the following constitute the Committee for the ensuing year:—Lord Vernon, Sir W. E. Welby-Gregory, Bart., M.P., Sir Brandreth Gibbs, Mr. J. H. Arkwright, Mr. W. Carruthers, Mr. W. Frankish, Mr. J. Bowen Jones, Lieut.-Col. Turbervill, Dr. Voelcker, and Mr. Whitehead. This report was adopted.

## HOUSE.

General Viscount BRIDPORT (Chairman) reported that the Committee had met twice, and made two reports. They recommended that Colonel Kingscote's name be added to the Committee. This report was adopted.

## IMPLEMENTS.

Mr. HEMSLEY (Chairman) reported the recommendation of the Committee that the secretary be instructed to write to the different Agricultural Societies, and others likely to assist in the loan of old and antiquated agricultural machinery for the "comparative museum" in the London showyard; and that entries for agricultural implements and machinery close on April 1st. A letter having been read from the Mayor of Carlisle, asking what implements should be tried in 1880, the Committee recommended that trials of new inventions connected with steam-cultivating machines be held in connection with the meeting of that year, and that the Committee be authorised to submit a draft of a prize sheet to an early meeting of the Council. The Committee had accepted the offer of the Mansion House Committee to give a special prize of a gold medal and £50 for the best waggon for conveying perishable goods—meat, poultry, fish, &c.—by railway at a low temperature. The Committee further recommended that the Society should offer the following prizes for plans of farm buildings:—For arable farms, not exceeding 300 acres, £50; over 300 acres,

£250. For dairy farms not exceeding 100 acres, £50; over 100 acres, £50. Plans (scale 8 feet to the inch), with complete specifications and money bills of quantities, to be sent in, addressed to the Secretary, by June 26th, 1879. The Committee had met five times, and made five reports, and they recommended that the following constitute the Committee for the ensuing year:—Lord Vernon, Sir Brandreth Gibbs, Mr. W. Anderson, Mr. T. Aveling, Mr. C. S. Cantrell, Mr. W. J. Edmonds, Mr. W. Frankish, Mr. J. Hemsley, Mr. C. Howard, Mr. J. Howard, Mr. J. Bowen Jones, Mr. J. Martin, Mr. R. C. Ransome, Mr. G. H. Sanday, Mr. W. Sheraton, Mr. J. Shuttleworth, Mr. R. Stratton, Lieut.-Col. Turbervill, Mr. Jabez Turner, Mr. C. Whitehead, Mr. Jacob Wilson, and the stewards of implements. This report was adopted.

## STOCK PRIZES.

Mr. CHANDOS-POLE-GELL reported that the Committee had revised the prize list for the London Exhibition, which will be printed and sent to members of Council and probable exhibitors. The Committee had met three times, and made three reports; and they recommended that the following constitute the Committee for the ensuing year:—Earl Spencer, General Viscount Bridport, Sir Brandreth Gibbs, Mr. J. H. Arkwright, Mr. Hugh Aylmer, Mr. Edward Bowly, Mr. H. Chandos-Pole Gell, Mr. W. Frankish, Mr. John Evans, J. Leusley, Mr. C. Howard, Mr. D. McIntosh, Mr. R. H. Massee, Mr. T. Pain, Mr. G. H. Sanday, Mr. W. Sheraton, Professor Simonds, Mr. R. Stratton, Mr. John Torr, M.P., Mr. Geo. Turner, Mr. W. H. Wakefield, Mr. Jacob Wilson, Mr. Geo. Wise, and the stewards of live stock. This report was adopted.

## VETERINARY.

The Hon. W. EGERTON, M.P. (Chairman), reported that four competitors had entered for the Society's veterinary prizes and medals. Dr. William Smith Greenfield had been appointed Professor Superintendent of the Brown Institution. Subject to the approval of the Governors of the Royal Veterinary College, the Committee were desirous of obtaining the services of the Inspector of the College for the members on the usual terms, any special report required, or investigation of outbreak of disease, to be paid for like any other special report. The Committee recommended that the grant of £250 be made to carry out experiments on the nature and mode of propagation of anthraxoid diseases, under Dr. Burdon-Sanderson. The Committee further recommended that the Secretary be instructed to ascertain from the General Steam Navigation Company whether, and on what terms, they would place at the disposal of the Society a quadrantine station for the reception of foreign animals entered for exhibition next year, and also the terms on which the Company would provide special steamers for their conveyance. The Committee had met six times, and made six reports; and they recommended that the following be the Committee for the ensuing year:—Earl Cathcart, General Viscount Bridport, Sir M. White Ridley, Bart., the Hon. W. Egerton, Sir Brandreth Gibbs, Professor Brown, Mr. Chandos-Pole-Gell, Mr. W. Duguid, Dr. Wm. Smith Greenfield, Mr. M. J. Harpley, Colonel Kingscote, Mr. James Adams, Mr. G. H. Sanday, Dr. J. Burdon-Sanderson, Professor Simonds, Mr. W. H. Wakefield, Mr. Wm. Wells, Mr. Jacob Wilson.

The Hon. Mr. EGERTON added that it would be observed that the last paragraph but one alluded to the new orders which had just been issued, and in consequence of which it would be necessary to provide quarantine ground for animals coming from certain countries. In all probability (cattle plague having broken out in Germany) Holland, and Belgium, would be unable to send animals to the forthcoming exhibition; but, assuming French earth to



in a healthy state, of course, it was desirable that quarantine should be made. He did not think the Council could ask for a relaxation of any restrictions that might be deemed necessary.

THE DUKE OF RICHMOND AND GORDON, K.G., said, in the first place he must apologise to the Council for not appearing to assist more in carrying on the business of a Society in which he took the deepest and most lively interest—an interest which he had inherited, and which he hoped to pass on to those who came after him. He appeared before the Council of the Society now partly as a member of that Council, partly as an agriculturist, but more particularly, probably, as Lord President of the Council; and he must say that when he received a copy of the proposed prize list, he was struck with the inconsistency of his colleagues on the Council and in the Shorthorn Society, in issuing a prize sheet in which was included a list of prizes for a number of animals that were invited to come from foreign countries. Without wishing to say anything personal to his colleagues, he thought they would all bear him out when he said that since he had had the honour of being Lord President of the Council, they had continually requested him to legislate for the prohibition of the importation of foreign animals. The views entertained by the Royal Agricultural Society and by the Shorthorn Society were these:—That to get rid of those diseases which, as they stated—and he thought perfectly rightly and justly—had affected so prejudicially their interests in this country, it would be necessary to pass a law enacting that all foreign animals should be slaughtered upon the other side of the water. (Hear, hear). Of course it became his duty to look into the matter very closely, and he found it was impracticable to carry out those views; and he therefore endeavoured to find a mode of solving this difficulty, and accordingly he brought in what he thought a good measure, but which at the same time was a very stringent one. It dealt with foreign animals in a very active manner. That measure, however, did not pass through both Houses of Parliament; it did pass eventually in a modified form, but still in a form which he believed would be extremely advantageous in the way of keeping down disease, and preventing it from appearing in this country. (Hear, hear). He was perfectly aware that in consequence of the great kindness and hospitality which was shown in Paris to all their friends during the past year, it had been thought advisable to make some return to the foreigner for what he had done to us. (Hear, hear). If that could be done with safety, he would be the first to agree to it; but he did not think that in doing so they should run any risk of disease being introduced into England, by admitting foreign animals with all the diseases which they could bring with them. That there was a great danger in coming into contact with these animals, those who took any active part in the Exhibition at Paris would, he was sure, be ready to admit. English animals went there free from disease, and came back with foot-and-mouth disease, so much so that he had to establish a quarantine station near London, to receive them on their return; and he was afraid that he had incurred the displeasure of some of his agricultural friends in the far north in consequence of their long detention in quarantine. There were certain countries from which no animal of any sort or kind could come at the present moment—viz., Russia, Austria, Italy, Greece, Turkey, and the Principality. Then, again, no cattle could come from Belgium or Germany; and when the Contagious Diseases (Animals) Act, 1878, came into operation, inasmuch as there was an outbreak of disease in Germany at the present moment, it was almost certain that on the 1st of January Germany and Belgium would continue to be prohibited countries. Other foreign animals were

slaughtered at the port of landing from all countries except Norway, Sweden, Denmark, Spain, and Portugal, and from America and Canada. The Act provided that animals coming from countries subject to slaughter might be sent for exhibition subject to quarantine regulations made under an Order in Council. That Order in Council provided that the landing at a port of foreign animals is subject to the following regulations: The animals must be accompanied by a declaration of the owners, assignees, or agents, to the effect that the animals are intended for exhibition, acclimatisation or domestication; secondly, the animals when landed are to be detained in the quarantine station for a certain period (which may be seven, or fourteen days or any longer period according to circumstances) and, thirdly, when moved they are to be accompanied by a certificate of an inspector of the Privy Council that they are free from disease. These were the regulations issued under the Foreign Animals Order, and made under the provisions of the Contagious Diseases (Animals) Act of this year; so that from a country like France, for example, they would be able to send animals for exhibition under these conditions, subject to such quarantine regulations as might be issued by the Privy Council; and he thought the foreign exhibitors ought to know the exact regulations not only that had been made but which might be made. It was quite obvious that the regulations which he might make would depend upon the state of matters at the time, but he thought it should also be shown to the foreigner that a country which was called a non-prohibited country to-day, might be a prohibited country to-morrow; and if a foreigner got up his animals with the intention of exhibiting in London next year, it might be necessary between this time and next June to declare his country a prohibited country. Therefore the foreign agriculturist ought to know the exact condition in which he might find himself. Before consenting to admit foreign animals, very stringent regulations would be imposed by the Privy Council. Of course the Royal Agricultural Society would know that when he passed orders for quarantine they would be solid and *bona fide*, and that he was bound to carry out, under the Contagious Diseases (Animals) Act, and by these Orders in Council, a real and *bona fide* quarantine. What he intended to do was to have such a quarantine as should, if possible, prevent us getting any foot-and-mouth disease into the show-yard at Kilburn. By some means or other, whether by the regulations which have been in operation or by the more thorough inspection of trucks and railway stations, there has not been for some years so little foot-and-mouth disease in the country as there is at present; and therefore he should be extremely sorry if, by a too lavish hospitality to foreigners we should bring over those diseases which foreign cattle were somewhat prone to. He would beg and urge upon the Council that before the prize-sheet was issued to the foreigner there should be a clear notice as to what he would undertake by entering his animals to be shown at Kilburn; and that it was quite possible that, though he might enter his animals within the time specified, circumstances might arise before the Exhibition took place which would entirely prevent his animals from coming to this side of the water. He understood that the Society were going to provide a quarantine station, but he apprehended that would be done under the Orders in Council, and that some quarantine station might be provided nearer to London than Southampton. In any Orders in Council issued in accordance with the Act he should only make such regulations as he deemed necessary to prevent the introduction of diseases into the country.

MR. JACOB WILSON was sure that the very best thanks of the Council were due to the noble Duke for attending the Council to give so complete a statement of his views;

but his Grace would doubtless admit that he had painted his picture in the darkest possible colours. With regard to the proposal to hold an international show, Mr. Wilson reminded the Council that on the occasion of the Society's last exhibition in London, when the late Prince Consort was President, it was international, and it was therefore considered desirable to make the coming exhibition international, especially as they had the honour of having the Prince of Wales as President. He did not think that English agriculturists had anything to fear from foreign competition, but he thought that both Englishmen and foreigners might learn a great deal from an International Agricultural Exhibition. The whole question was, no doubt, of greater value to the consumer than to the producer of meat, and it was this view which induced the Mansion House Committee to offer the very handsome prizes for Foreign Stock and Produce shown in the prize list, and otherwise to make the character of the show international. During the whole of the time when the subject was receiving the anxious consideration of the Stock Prizes Committee it was understood that precautions of a very stringent character would have to be taken, and foreign agricultural societies had already been warned of the fact. He could not sit down without alluding to the charge of inconsistency brought against the Council of the Society, because the importation of specially selected animals for exhibition had always been contemplated by the Government; and when the Council asked his Grace and the Government to bring in some measure to prevent diseases being introduced into the country, it had in its eye the scam of foreign animals which were imported in the ordinary course of trade from week to week, in vessels reeking with disease, and not animals specially selected for exhibition, in specially chartered steamers. He begged to move the following resolution:—"That the Privy Council be respectfully requested to inform the Society, as far as possible, under what conditions and regulations foreign animals from different countries will be allowed to be exhibited in the Society's showyard next year, in the event of the countries from which the animals are sent being declared free from disease at the time when animals are exposed."

The Hon. W. EGERTON thought the Council should be satisfied with his Grace's explanation, and the only thing they could do was to furnish the foreigner with particulars of all the regulations which might be enacted.

Colonel KINGSCOTE seconded Mr. Wilson's proposition. The offer of prizes for foreign animals had not emanated from the Society, but from the Mansion House committee, whose views the Council had endeavoured to carry out. The one object they had in view had been to bring over foreign animals under such regulations as happened to be in force at the time whatever they might be. The proposition of Mr. Wilson would be very useful, because it would enable the Society to publish to the countries abroad exactly what they would have to expect if disease broke out in May or June.

After a conversation in which Mr. Randall, Mr. Dent, Mr. Pain, Earl Cathcart, and the Duke of Richmond took part, the Committee's report with the addition of Mr. Wilson's motion, was unanimously adopted; and on the motion of the Hon. W. Egerton the renewal of the veterinary grant of £250 for the year 1879, for general purposes and for special scientific inquiries, was also agreed to.

#### LONDON EXHIBITION.

Colonel KINGSCOTE (chairman) reported the arrangements they had made in reference to the water supply for the London Showyard; that several applications having been received for permission to exhibit preserved meats and provisions, it had been decided to admit only those for which prizes were offered; that the offer of Mr. M.

B'dulph, M.P., of prizes to the value of £100 for cider and perry had been accepted; that a communication had been received from the Essex Agricultural Society offering new terms of amalgamation, but that the committee had decided to adhere to their original offer; that the offer of Messrs. Fowler and Co. to lay down a tramway in the show-yard, under the supervision of the Society, had been accepted; that a memorial having been received from the inhabitants of Kilburn asking for the extension of a road to provide better means of entry into the show-yard, it had been resolved to write to Messrs. Clutton, the agents of the Ecclesiastical Commissioners, supporting the application; that the Committee had accepted Professor Church's suggestion respecting the loan of the "Circulating Food Collection," prepared for the Science and Art Department. The Committee had met ten times and made ten reports; and Mr. Bowly and Mr. Pain were added to the list of the Committee. This report was adopted.

#### SHOW YARD CONTRACTS.

Mr. JACOB WILSON (chairman) reported the recommendation of the Committee, that Mr. Unite's tender for the supply of new canvas to the sheds in the London show-yard be accepted according to the sample and specification placed before the Committee. The Committee had received a report from the surveyor relating to the drainage and railway siding, and the Surveyor had also submitted plans for the show-yard, one of which was approved, subject to certain minor alterations. The Committee had met twelve times, and made nine reports; and they recommended that the following be the Committee for the ensuing year:—General Viscount Bridport, Sir Brandreth Gibbs, Mr. C. E. Amos, Mr. T. Aveling, Mr. H. Chandos-Pole-Kell, Mr. W. Frankish, Mr. J. Hemaley, Mr. C. Howard, Mr. C. Randall, Mr. J. Shuttleworth, Mr. R. Stratton, Mr. Jacob Wilson. This report was adopted.

#### EDUCATION.

The Duke of BEDFORD (chairman) reported the following result of the last junior examinations:—

Schools.	Candidates.	Ages.					Remarks.
		Agriculture 200, Pass No. 75.	Chemistry 300, Pass No. 75.	Mechanics 200, Pass No. 75.	Land Surveying 100, Pass No. 40.	Totals, Pass No. 350.	
Surrey County School	Caldecott, C.	17 130	184 104	74	191	1st	
"	Whyles, F.	17 95	158 135	70	434	2nd	
Devon County School	Chope, R. P.	16 130	96 147	79	452	3rd	
Glasnevin College	Roche, J.	17 160	118 101	61	435	4th	
Surrey County School	Waghorn, A. J.	17 130	110 130	43	4	5th	
"	Furnival, B.	16 100	104 127	67	398	6th	
Sandbach School	Rigby, J.	15 96	140 91	50	386	7th	
Devon County School	Haynes, J.	17 105	98 125	50	376	8th	
Sandbach School	Lowe, T.	17 90	190 91	52	400	9th	

The examiner in agriculture (Mr. J. C. Morton) reported that there were two or three unusually good papers, indicating a very thorough acquaintance with many of the subjects to which the questions related. The examiner in chemistry (Dr. Voelcker) reported that the paper by Charles Caldecott was deserving of the highest praise, nearly every question having been answered by him fully and satisfactorily. The papers by F. Wyles and Rigby were also very good. The majority of the candidates had acquitted themselves satisfactorily in this examination, and their answers afforded a clear evidence that the

elements of chemistry were intelligently taught in most of the schools from which pupils came up for examination. The examiner in mechanics and land surveying (Rev. Professor Twiden) reported that, on the whole, the examination had brought out results quite as good as the usual average. One of the boys—Chope—did distinctly best in both subjects; and it was only fair to him to say that his work was very good in point of style and neatness, as well as in other respects, though he had failed to answer a few of the questions. The Committee recommended that cheques be drawn for the scholarships won at the November examination of 1877. They also recommended that the senior examination be held as usual in April, 1879. The Committee had received from Professor Tanner a statement in reference to the examinations in the principles of agriculture held by the Science and Art Department of the Committee of Council on Education. The Committee moved for a renewal of the education grant for the ensuing year; and they had to report that the expenditure during the current year amounted to £235 8s. 6d. The Committee had met four times, and made four reports, and they recommended that the following be the Committee for the ensuing year:—The Duke of Bedford, Mr. T. Aveling, Mr. W. Carruthers, Mr. J. D. Dent, Mr. J. Bowen Jones, Colonel Kingscote, Lieut.-Col. Turberville, Dr. Voelcker, Mr. Charles Whitehead, Mr. G. Wise. This report was adopted.

#### SELECTIONS.

Earl CATHCART (chairman) reported the nomination by the Committee of members of Council to fill vacancies. The committee had met five times and made five reports, and they recommended that the following constitute the committee for the ensuing year: Earl Cathcart, General Viscount Bridport, Mr. Chandos-Pole-Gill, Mr. Dent, Mr. Hemsley, Colonel Kingscote, Mr. Jacob Wilson. This report was adopted.

On the motion of Earl CATHCART, seconded by Colonel KINGSCOTE, Mr. William Wells was elected a trustee in the room of Mr. Milward, resigned.

LORD VERNON observed that Mr. Milward's resignation should not be accepted without a word being said respecting his services. During the last twenty years Mr. Milward had been a most prominent worker for the Society, and the Council would always recognise his long, active, and valuable services.

Earl CATHCART entirely concurred with Lord Vernon's remarks, and proposed that a letter be written to Mr. Milward expressing the regret of the Council at the retirement. No man had done more for the Society than Mr. Milward.

The resolution was unanimously adopted.

On the motion of Earl CATHCART, seconded by Colonel KINGSCOTE, Mr. J. B. Lawes was elected a Vice-President in the room of Mr. Wells, elected a trustee, Lord Cathcart bearing testimony to the value of Mr. Lawes' services to the Society and to the nation both in person and in purse.

On the motion of Earl CATHCART, seconded by Colonel KINGSCOTE, Mr. D. R. Davies, of Agden Hall, Lynn, Cheshire, was elected a member of Council in the room of Lord Skelmersdale, elected Vice-President; and on the motion of Mr. RANDALL, seconded by Colonel KINGSCOTE, Mr. Davies's name was added to the Finance Committee.

It was announced that 40 entries had been received to compete for the prizes offered for English hops, and that the entries of foreign hops would close on March 1.

A letter was read from Mr. W. H. DELANO, accepting the office of Honorary Agent in France for the London Exhibition, 1879.

Letters respecting carriage of cattle in horse-boxes, were read, and

Mr. JACOB WILSON remarked that Australian ports have been opened for the conveyance of cattle from this country, but one of the conditions is that there shall be ninety days' quarantine on arrival, and the other condition is that conveyance in England shall be by horse-boxes only.

The report from the Council to the general meeting was prepared.

The usual holidays having been granted to the Secretary and Clerks, the Council adjourned until Wednesday, February 5th.

#### THE ANNUAL MEETING.

The Annual Meeting of this Society took place on December 19, at Hanover Square. In the unavoidable absence of His Royal Highness the Prince of Wales the chair was taken by Sir Brandreth Gibbs.

The SECRETARY (Mr. H. M. Jenkins) read the Report of the Council, which was as follows:—

"The Council have to report that during the year 1878 the number of Governors and Members has been increased by the election of 4 Governors and 431 Members, and diminished by the death of 5 Governors and 110 Members, and the removal of 183 Members by order of the Council and by resignation. The Society now consists of—

79 Life Governors,  
73 Annual Governors,  
2377 Life Members,  
4243 Annual Members,  
26 Honorary Members,

making a total of 6797, and showing an increase of 157 Members during the current year. The Council announce with deep regret the death of their most valued colleagues, Sir William Miles, Bart., a Vice-President, and Mr. T. C. Booth, of Warraby, Northallerton, a Member of the Council. They have also to report the resignation of Mr. Milward, of Thurgarton Priory, Notts, as a Trustee of the Society. The vacancies thus caused have been filled up by the election of Mr. Wells, of Holmewood, Peterborough, as a Trustee, of Lord Skelmersdale as a Vice-President, and of Mr. D. R. Davies, of Agden Hall, Lynn, Cheshire, as a Member of the Council. The half-yearly statement of accounts to the 30th June last has been examined and approved by the Society's auditors and accountants, and has been published for the information of the Members in the last number of the *Journal*. The funded property of the Society remains the same as at the last General Meeting, namely, £26,511 11s. 5d. New Three per Cents. The balance of the current account in the hands of the Bankers on the last inst. was £242 10s. 10d., and the sum of £1000 remained on deposit. The Bristol Meeting was in every respect highly satisfactory. The entries of Live Stock and Implements were very large, the attendance of the public was good and the result to the Society profitable. The visit of His Royal Highness the Prince of Wales gave the citizens their long-wished-for opportunity of showing their loyalty, while the Mayor of Bristol, the Local Committee, and the Merchant Venturers, vied with each other in their hospitality to the Society. The trials of Dairy Appliances were most successfully carried out in the show-yard, and were daily watched with interest by numbers of dairy-farmers and others. The trials of the Sheep-binders which competed for the Society's Gold Medal, took place at harvest-time on Mr. Miles's farm at Leigh, near Bristol, and resulted in the award of the Gold Medal to Messrs. Waite, Burnell, & Co., for McCormick's sheaf-binder, the binder exhibited by Mr. Walter A. Wood being highly commended. The prizes offered by the Local Committee for arable and dairy farms attracted only 3 competitors in the former class but as many as 15 in the latter. The reports on this competition, on the trials of sheaf-binders and dairy appliances, and on the exhibition of stock and implements, will be published in the forthcoming number of the *Journal*. In connection with the Paris Universal Exhibition, an Agricultural Congress, at which the Society was

mentally represented, was held at the Palace of the Trocadero. At the desire of the Society of French Agriculturists, the Council caused a memoir on English agriculture to be prepared and laid before the Congress. That memoir has since been issued to the members of the Society in lieu of the usual autumn number of the *Journal*, and the Council be here that this proceeding has met with general approval. The preparation for next year's meeting of the Society, which will assume the form and proportions of an International Agricultural Exhibition, are in active progress. A very convenient site at Kiburn, one hundred acres in extent, has been obtained from the Ecclesiastical Commissioners, whose agents have shown themselves most desirous of furthering the objects of the Society. The land selected is situated between the London and North Western and the North London Railways, and adjoins the new Salisbury-road station on the former and the Kensal Green station on the latter line. It is three-quarters of a mile from the West-end station on the Midland Railway, the same distance from the Westbourne-park station on the Great Western Railway, and two miles and a half from the Marble Arch. The prize-sheet will contain classes for all the distinctive breeds of English horses, cattle, sheep, and pigs, and also for the distinctive breeds of Foreign stock from countries which are not prohibited by any Orders in Council issued under the Contagious Diseases (Animals) Act, 1878. Prizes will also be offered for asses, mules, goats, butter, cheese, wool, hops, seed-corn, and meat. The Shorthorn Society have offered prizes for Foreign Shorthorns, the hop-growers have offered the prizes for English grown hops, and the Mansion House Committee have offered the prizes for Foreign stock and produce. The Mansion House Committee have also offered handsome prizes for sewage farms and market gardens, and the Council are glad to report that there will be a fair competition in all the classes. In addition to the exhibition of British and Foreign implements, live-stock, and produce, it is proposed to enliven the interest and the instructiveness of the meeting by showing some of the processes of Foreign weaving in actual progress in the enclosure, as well as traction engines and automatic implements in action. It is also proposed to exhibit side by side representatives of ancient and of modern farm implements and machines, which the Council will be lent by their possessors for the purpose, and thus aid in the comprehension of the great advance which has been made in agricultural machinery during the forty years which have elapsed since the Society was established. The Exhibition will commence on Monday, June 30th, and will close on Monday evening, July 7th. The district assigned for the country-meeting of 1880 includes the counties of Northumberland, Durham, Cumberland, and Westmoreland, and the Council have already received a pressing invitation for that year from the Mayor and Corporation of Carlisle. During the past year the Legislature have amended the law relating to the Contagious Diseases of Animals of the Farm, giving additional protection against the importation of such diseases with foreign animals, and securing greater uniformity of action amongst local authorities in the event of outbreaks within the United Kingdom. The Council have continually urged the necessity of adopting measures based on these principles, and they trust that the recent Act, and the Orders of the Privy Council based upon it, will not only prevent to a great extent those losses which English farmers have hitherto suffered from the outbreaks of Contagious Diseases amongst their flocks and herds, but also enable them to increase their stock profitably, on account of the diminished risk which breeding on an extended scale will henceforth entail. The experiments upon pleuro-pneumonia have been continued during the greater part of the year at the Brown Institution, under the superintendence of Dr. Burdon-Sanderson whose complete report will appear in the next number of the *Journal*. Very valuable indications have been obtained, but unfortunately one of the provisions of the new Contagious Diseases (Animals) Act prevents the further continuance of these investigations. With the sanction of the Council, Dr. Burdon-Sanderson has commenced a series of researches into such diseases as splenic apoplexy and quarter-evil, the nature and causes of which are at present more or less obscure. The experiments at Woburn are being continued on the plan originally laid down, and Dr. Vuelcker's report on the results obtained during the past year will appear in the next number of the *Journal*. Further experiments on feeding stuffs have also been commenced, and purposes is in contemplation. As reported at the last annual

the utilisation of a portion of Crawley farm for experimental meeting, the Council have decided to furnish the Consulting Chemist with a laboratory and all its adjuncts, so as to reduce the fees for analysis to be charged to members of the Society to about one-half their present amounts. The structure of the laboratory is now finished, and the Council expect that the fittings will shortly be in place, so that the operation of the new scheme will commence with the approaching year. The advantages thus offered to members of the Society are so great that the Council confidently expect them to attract a large accession to the roll of members. Twenty-nine candidates were entered for examination for the Society's Junior Scholarships from the following schools:—Aspatia Agricultural School (4), Bedford County School (2), Devon County School (2), Glasnevin College (1), Sandbach Grammar School (4), and Surrey County School (18). The following candidates, arranged in order of merit, have gained scholarships:—1st, C. Caldecott, 2nd, F. Wyles, (Surrey County School); 3rd, R. P. Chope, (Devon County School); 4th, J. Roche, (Glasnevin College); 5th, A. J. Waghorn, 6th, B. Furnival, (Surrey County School); 7th, J. Rigby, (Sandbach School); 8th, J. Haynes, (Devon County School); 9th, T. Lase, (Sandbach School). Four candidates have entered to compete for the Society's medals and prizes offered to veterinary surgeons of not more than fifteen months' standing, for proficiency in cattle pathology, and the examination will be held at the Royal College of Veterinary Surgeons in the course of the ensuing month.

By Order of the Council,

H. M. JENKINS,

Secretary.

Mr. MOORE, in moving the adoption of the Report, said he knew the Council of that Society desired that members of the Society should express their opinions on occasions of that kind, and he wished to say a few words. He would first remark that they might well congratulate each other upon the success of the past year, and he thought they might anticipate still greater success in the coming year. It was satisfactory to learn from the Report that there had been an increase in the number of members, and he knew from personal observation how very successful was the Society's Meeting at Bristol. The last number of the *Journal* was one of the most valuable numbers issued since the Society was formed (cheers). It contained several standard articles in which a comprehensive view was taken of the subject treated. He was glad that the question of diseases affecting stock had been recently dealt with by the Legislature in the right direction, and he believed that, with the co-operation of farmers throughout the country, they would all be preserved to a much greater extent from any risk of disease being spread, as it had been, through the moving of animals about the country. Of course they were all looking forward to the Great International Exhibition which was to take place in London next year. He well recollected that the last Metropolitan exhibition—that at Battersea—was very much like a failure; but he had no doubt that the Council of that Society would take the necessary steps for giving the approaching Exhibition such a character that it would interest and attract, not only agriculturists, but also the inhabitants of the Metropolis and of other towns. He thought it was well for the Society to imitate in some degree the Bath and West of England Society, and without losing its special character, or doing anything which was foreign to its object, endeavour to attract large numbers of persons to the annual show. As regarded the Woburn experiments referred to in the Report, he felt certain that they would prove of great value, and he hoped the Council would give as much publicity as possible to them when they were completed, or as they progressed. The arrangements made for the reduction of the cost of analysing soils, artificial feeding-stuffs, water, &c., for the benefit of members, should be known to all the members, as they could not fail to prove very useful. In proportion as science was combined with

practice in farming operations farmers might be expected to manifest greater interest in that department of the Society's work, and he believed that Dr. Voelcker would now be more troubled with communications from farmers than he had been.

Mr. TAYLOR, in seconding the motion, said he had been often asked why the Society retained such a large amount of funded property—the amount now reported by the Council was £26,500—instead of applying a portion at least in furthering the objects for which it was formed.

The CHAIRMAN said he would answer that question at once. The accumulation of funded property was partly the result of two very successful meetings—one at Birmingham, the other at Liverpool. It was desirable that a Society like that should have a large amount of invested capital to meet any contingency which might arise in the future (Hear, hear); but that the Council were willing to expend a portion of the capital was evident from the fact that they had just erected a new laboratory, which he hoped would be of great service to the members of the Society (cheers).

Mr. W. BOTLY said the increasing interest of the contents of the *JOURNAL* obviously made it desirable that it should be read more generally by the agriculturists of the whole kingdom. He would, therefore, ask whether, with the ample funds at the disposal of the Council, it would not be well to do something to promote that object? Might not landlords be supplied with copies at a reduced rate for circulation among their tenants, so that the interesting articles which appeared from time to time might become more practically and extensively useful? If some plan could be devised for issuing a number of copies at 2s. each, the *Journal* would, he believed, be far more widely circulated, and he hoped the Council would take his suggestion into consideration.

Sir J. H. MAXWELL expressed a hope that the invitation to hold the meeting in 1880 at Carlisle would be accepted, and his belief that the Corporation of Carlisle and the people of the town and district would in that case do everything in their power to ensure success.

Mr. C. S. READ, M.P., said the interesting report just presented embraced many points, and seemed to him deserving of notice. It was a very happy feature that in these days of agricultural depression that Society had such a good balance at its bankers, some money on deposit, and a large invested fund. As regarded the invested fund, he apprehended that it represented in a great measure the impositions paid by life members (Hear, hear); and when there were so many members of that kind it was necessary that a considerable amount should be reinvested (Hear, hear). The next point to which he would refer was one of painful interest and deep regret; he alluded to the deaths of that thoroughly good old English gentleman, Sir William Ailes, and their most excellent friend, Mr. Booth (Hear, hear). He did not think a meeting of that kind should terminate without some speaker's adverting to the great loss which the Society and agriculture generally had sustained in the death of Mr. Booth. Not only was he a champion breeder of Shorthorns, and an excellent agriculturist, and an excellent man in all the relations of life, but the services which he rendered to farmers by the course he pursued in conjunction with their friend Mr. Jacob Wilson for the protection of their interests during the progress of the Cattle Diseases Bill through the House of Commons were such as no outsider could form any idea of (Hear, hear). Not only were those two gentlemen at the House every day but he thought he might say almost every hour during the discussions, and by the sound practical advice and good sense, and by the friendly pressure which they brought

to bear upon weak-kneed members they very materially contributed to make the Act as good as it was. It was not perfection, it was not the same as it was when originally introduced; but it was a very great improvement on previous legislation, and he hoped it would do much good in the country. He wished to say one word about the *Journal*. Although there had been several very good numbers of that periodical since the Secretary became the editor, there had been none, in his opinion, that could be compared with the one recently issued (cheers). He hoped that after being read, it would be bound in calf, and placed in a good position on a shelf. It was not a work to be read and then laid aside, and not thought of in after years, it was a book of reference for the next generation. The different essays were marvellous in accuracy, nice in language, and remarkable for wisdom. Things were presented to the mind in a very readable form. There was a great deal that was interesting to farmers as a body, and a great deal that many of them did not know, and would do well to remember. Mr. Caird's remarkable essay was written from an English point of view, for the enlightenment of their brethren on the other side of the Channel, and it was desirable that it should be kept in the front. It was quite unnecessary to tell the world that when Englishmen plough the sea or the land they were successful; but he doubted whether such great stress ought to be laid on the notion that the success of agriculture had resulted chiefly from the financial policy of the last few years (Hear, hear). He trusted the farmers of England would never hanker after protection (Hear, hear). Free trade was imposed on them by those who did not seem to like it quite as well as they did a few years ago—(hear, hear)—but let that pass. It did not follow as a matter of course because land sold at a higher price in some localities than in others, and some articles of foreign produce were of greater value than they were a few years ago, that landlords were better off or farmers more prosperous. He believed exactly the contrary. In the first place, as to the high price of land he found that in those remote districts which were not affected by great population or railway communication land did not sell for a penny an acre more than it did 35 years ago. That he could prove from facts connected with his own district more especially.

Then with regard to the management of estates, gentlemen who were connected with large landowners knew perfectly well that the expenses of management had, of late, considerably increased, and he was not aware that in rents generally, as compared with those of five and twenty years ago, there was any considerable advance. As to farmers themselves it was quite certain that all animal products had risen very much in value; but as the cost of producing meat, milk, butter, &c., had increased in like proportion, and it did not follow as a matter of course that profits had largely increased; but it did follow as a matter of course that there must now be a very large amount of capital invested in farming. Those observations had appeared to him to be necessary under the circumstances. He highly appreciated the freedom with which writers now put forward their political views in the *Journal* of that Society, although perhaps the result might be that hereafter writers who held political opinions of a different kind might express their dissent from some of the advanced views which had been previously expressed (Hear, hear). He thought Mr. Caird's most comprehensive essay ought to be more widely circulated, and he hoped it would be published separately by the author—(a member: "It has been published by him.") He was sorry to say he had not seen it. He hoped, however, that it would be published in such a form and at such a price that it would be read by almost every farmer in the kingdom. He had

nothing else to say, unless it were to express his fervent hope that the great International Exhibition of the coming year would prove a greater success than that held at Battersea Park some years ago. He believed the measures taken by the Mansion House Committee would do very much to popularise the approaching Exhibition among Londoners; and, although of course he earnestly and especially desired agricultural success in connection with the exhibits, yet he would impress on the Council the necessity of securing for remunerative purposes a large attendance of the people of London.

Mr. JACOB WILSON, in proposing a vote of thanks to the auditors, observed that although that Society had a very efficient finance committee, the duties of the auditors were important, and there could be no doubt that they had been and were performed in a very satisfactory manner.

The motion having been seconded by Col. TURBERVILLE, was put and carried.

The CHAIRMAN said he had now to ask if any gentleman present had any question to ask or suggestion to offer that might be referred to the Council for consideration.

Mr. BOWICK expressed doubts whether the Society had done as much as it ought to have done to improve the condition of agricultural labourers, embracing in his remarks the question of education and that of labourers' dwellings; he concluded by making the following suggestion:—"That the Council of the Royal Agricultural Society be respectfully asked to appoint a Commission to inquire into the working of colportage in the country districts, to receive evidence, and to report on the same, and otherwise to carry out the objects of the Society's Charter of Incorporation, with special reference to the condition and welfare of the labourer."

Mr. AVELING remarked on behalf of the Council that it had not neglected the objects to which Mr. Bowick alluded, and in illustration of this referred to what had been done for the improvement of labourers' cottages and gardens.

Professor COLEMAN said he hoped the Council would take some action in reference to the scheme the Government had inaugurated for teaching in elementary schools the science of agriculture. So far as he understood that scheme, it appeared a very admirable one; but it did not begin at the right end. What was especially needed was a better education for the sons of small farmers, and for that purpose agricultural teaching should be introduced into the parish schools. If the Government would allow agriculture to form one of the subjects of examination for certificated teachers, the result would be they would prepare themselves for the work of teaching the principles of agriculture to boys in schools, and that would ultimately be of very great value to the sons of small farmers. Many sons of farmers in his own district had to commence and finish their education in parish schools, and teachers generally had sufficient intelligence to acquire the kind of knowledge requisite for the purpose to which he alluded.

Mr. BELL (Newcastle-on-Tyne) called attention to what was done at the meeting of the Central Chamber of Agriculture on the previous day, for the purpose of showing that it was moving in the direction in which Professor Coleman desired the Council of that Society should move.

The SECRETARY said perhaps he might be allowed to state that the whole question of the education of agricultural labourers and small farmers was at present under the anxious consideration of the Education Committee. It had been discussed very carefully for the last two months, and only on the previous Monday the Committee had an interview with the Examiner in Agriculture who

acted for the Government and awarded the certificates which they offered to teachers as a recompense for their efforts to prepare themselves to instruct pupils in agriculture. No less than 1,200 pupils in the elementary schools throughout the country had submitted themselves for examination in agriculture this year.

Mr. C. S. READ, M.P., said he hoped the Council would ask the Education Department to provide better text books on agriculture than those which had come under his notice. The text books which were issued by the Privy Council for Ireland were infinitely superior to those in use in England.

The SECRETARY said that the question was asked on Monday, and the Privy Council simply declined to recommend any text book at all.

Mr. FINLAY DUNN said that having had some experience of the working of rural schools, he believed there would be little difficulty in introducing two or three times a week, for half an hour each time, consistently with the time tables, a few lessons in elementary agriculture; and he thought every gentleman in that room who had had anything to do with labourers and the poorer class of farmers, must feel that by giving boys a certain amount of elementary teaching in the principles of agriculture, they would be doing a vast amount of good, and implanting in their minds a taste for subjects which would carry them into the science classes. It seemed to him that unless some arrangement were made for that purpose in the ordinary parochial schools it would be impossible to accomplish the object. It would be far better for boys to be taught that which was connected with their future occupation than to have their minds ground up with history, grammar, and geography (Hear, hear). By passing an examination in special subjects boys enabled teachers to earn a little more money themselves, and he saw no reason why agriculture should not have the benefit of that system.

Mr. WELLS quite agreed with previous speakers as to the necessity of providing a better education in the science and theory of agriculture for the sons of small farmers. In large schools which were originally founded in Devonshire and Bedfordshire for sons of small farmers, practically such persons were not seen at present. He believed there were now only four or five. The suggestions of Professor Coleman on that subject appeared to him very valuable.

Mr. FINLAY DUNN said he had to ask the meeting to accord a vote of thanks to Sir Brandreth Gibbs for his conduct in the chair (cheers). The name of the Chairman was known not only in this country but throughout the world as that of one of the most industrious, hardworking, and indefatigable promoters of agricultural progress in all its phases that had ever existed. Sir Brandreth was an admirable example of the motto of the Royal Agricultural Society. He united most thoroughly in his own person "Science with Practice," and for many long years he had devoted a large amount of his excellent abilities and his remarkable energy to the development of agriculture, not only through that Society, but also through other important kindred associations. Long might he live to continue to apply his powers to the promotion of their common interests (cheers).

Sir J. H. MAXWELL, in seconding the motion, said it must be exceedingly gratifying to every one present to see a gentleman who had rendered such eminent services to the Society in the chair; and he would add that it must be also gratifying to them to know that Her Most Gracious Majesty had recognised his services to agriculture in the manner she had done recently (cheers).

The motion having been carried by acclamation, the CHAIRMAN said—Gentlemen, I regret exceedingly that in the absence of His Royal Highness the Prince of Wales,

our President, it has fallen to my lot to take the chair to-day, because I feel perfectly inadequate to the discharge of such duties as have devolved on me. I also find great difficulty in acknowledging the very flattering compliment which the mover and seconder and the meeting have been good enough to pay me. I will not detain you by anything like a speech, especially as many have heard perhaps sufficient of my voice elsewhere during the last few days (laughter). Allusion has been made to the show which was held at Battersea some years ago. For my own part, I have no apprehension whatever that the next meeting in the metropolis will not prove a very great success (Hear, hear). The Battersea show had to contend with the Great Exhibition at South Kensington, which drew away a vast number of visitors who would otherwise have come to us. Moreover, it is within my own knowledge that so great was the difficulty of getting to Battersea that numbers of persons were waiting in different parts to obtain conveyances to take them there; but in the admirable position in which the show-yard will be placed next year, there is a guarantee against anything of that kind. I cannot allow the meeting to close without expressing individually my deep regret at the loss which the Society has sustained by the death of Sir William Miles and Mr. Booth. It so happens that I am, I believe, the only surviving officer of the Society, who worked with Sir William Miles in the early period of its history. When I became the director of the show at Southampton, Sir William was one of the judges of implements, and I can

well recollect the encouragement he gave me at that period. I do feel very much the loss which has been sustained through the death of any former colleague. Of Mr. Booth I need not speak, because you must all know of his good qualities, and some of you have witnessed their exhibition lately. One advantage of these general meetings is that every member of the Society has an opportunity of bringing before the Council any subject that he considers important, and a very long experience with regard to the proceedings of the Council enables me to declare that they are always most ready and anxious to take suggestions into consideration. Suggestions made on occasion like this are not, I can assure you, shelved (cheers). They all in many cases referred to committees who devote to them most anxious deliberation, and they are afterwards brought before the Council for final consideration. The suggestions which have been made to-day will also be brought before the Council in due course, and I am sure they will all receive the attention they deserve. Before sitting down it is my duty to call your attention to the fact that the entries for live stock next year, instead of being closed on the 11th of June, as has been the case hitherto, will, in consequence of the earlier date of the show, be closed on the 1st of May, and that the entries for implements, instead of being closed on the 1st of May will be closed on the 1st of April (Hear, hear). It has been thought desirable that these changes should be mentioned thus publicly, lest any intending exhibitors should be disappointed (Hear, hear).

The meeting then separated.

## CENTRAL FARMERS' CLUB.

The usual December meeting of the Farmers' Club took place on Monday, Dec. 9, at the Caledonian Hotel, the attendance being, as in previous years during the Cattle Show week, very large. The Chairman for the year, Mr. J. Brown, of Elwyn Orchard, March, presided. The subject for discussion was introduced by Mr. J. K. Fowler, of the Prebendal Farm, Willowbank, Aylesbury; being "The Paris Exhibition: its Agricultural Teachings."

The CHAIRMAN, in opening the proceedings, said: Gentlemen,—The reader of the paper to-night (Mr. Fowler, of Aylesbury) is so well known to most of you that he needs no introduction from me; but I hope and trust that he is not the only gentleman present who has been to Paris this year, and that he will not have it entirely his own way. I am quite sure that you will all be ready to listen to his paper, and I now call upon him to address you (cheers).

Mr. J. K. FOWLER then read as follows:—Before reading my paper, I must apologise for what you may think its shortcomings, as to "the Agricultural Teachings" of this show; but I found, as I went into the subject, that it would be so lengthy, and embrace so many heads of discussion, that rather than bore you too much I would confine myself to-night to a description of the live stock, and a glance at the implements; and leave for the future, and for others, to take up the various departments that would interest every one of you. I may mention "The Horse Show," "Trees and Forestry," "Fruit Growing and Market Gardening," "Bee-keeping"—which in some parts of France return over two hundred thousand pounds sterling a year,—a source of profit from the land much neglected in this country—and the "General condition of the French farmer and peasant." These would form a whole year's description for the Club, if found advisable.

Some few years since I had the honour of reading at your Club a paper on the "Influence of Railways on Agriculture," and I think a paper on the "Influence of Railways on Agricultural Exhibitions" would be of additional value; at all

events, without the great net-work of railways, both here and on the Continent, it would have been impossible to have gathered together so great a display of live stock and agricultural implements as were exhibited in Paris in the first fortnight of June. This great International Exhibition has occupied so large a share of the attention of the civilised world during the year now drawing to a close, that it would be well to look to the lessons, if any, which they have taught the British agriculturist; and I hope it will not be deemed presumptuous in me to endeavour, as concisely as I can, to give you some of the views I have drawn from that Exhibition.

You are doubtless aware that I had been appointed to take charge of the live stock and poultry, both going and returning, and to assist Mr. (now Sir) Brandreth G. B. in the management whilst in Paris. I had thus an opportunity of making myself acquainted with the general characteristics of the various breeds shown, and also to gain some information as to their agricultural position in comparison with us.

I shall first briefly describe the arrangements made for the transit of the live stock from this country. On June 1 we left St. Katherine's Wharf about 2 p.m., after loading the cattle and poultry, and sailed down the Thames for Boulogne direct, and arrived there about 11:30 the same night, and at daylight the next morning commenced unloading them from the ship into the railway trucks—the train consisted of fifty-five large cattle trucks and vans, and was over a quarter of a mile in length—and we arrived at La Chapelle Station, in Paris, about two o'clock on Monday morning, and the cattle, &c., were conveyed in large cattle wagons to the "Place des Invalides," where the show was to be held, and all safely deposited by about six o'clock in the afternoon. The large space in front of the Invalides was fitted up with commodious lofty cattle sheds, with every convenience, which filled the centre; and on the east side of these sheds were the French sheep and pigs, and on the west the English, whilst the poultry occupied a large space in the south-west corner of the enclosure. Everything done by the French Government is with the strictest routine, and all the arrangements were carried out most scrupulously. Down the centre between the cattle sheds, in a line with the dome of the Invalides, the broad road was laid out with green turf and flower beds, brilliant with scarlet



granaries and other flowers, and at each end of the shedding were groups of handsome evergreen shrubs. There were offices for the French and foreign authorities, a restaurant for the men in attendance; where Sir P. C. Owen, the indispensable and enthusiastic Secretary to the British Commission, had provided daily a hot dinner at a cheap rate for the men; also a first and second class restaurant for the general visitors. Water was laid on at each end of the shedding, and very large buildings for the storing of forage, meal, &c.

It will be useless for me to trouble you with a lengthy description of our English live stock, as you all know the characteristics of our various breeds; most of them were fairly represented, except the Herefords, where Her Majesty the Queen was the only exhibitor. The Shorthorns were represented from the sheds of Her Majesty, the Marquis of Exeter, Earl Bective, Lady Pigot, Mr. Fox of Elmhirat, and myself. The Devons and Sussex by the Queen, Mr. Walter Farthing, Messrs. Stanford, and Mr. Rolis Foyer. The Scots, nobly shown by Mr. McCombie, Sir Macpherson Grant, Mr. Colman, and Mr. Duncan. Longhorns, by the Duke of Buckingham and Mr. Farmer; and the little Kerrys by Messrs. Robertson, from Ireland. No Alderneys were sent, and only one Ayrshire. Altogether, it is to be regretted that so few were sent; but, as I have shown, most of our breeds were represented. It was different with our sheep, where some of our classes came out exceptionally strong. First on the list were the Southdowns, and Lord Walsingham, as usual, sent some very choice specimens, as did also His Royal Highness the Prince of Wales. The French are great admirers of this breed, and do not seem to care so much for others, as they do not require large fat mutton for their tables; and they use them also for crossing with their Merinos. The Oxfordshires were an excellent class. The Hampshire were only represented by Mr. Robert Russell, and the Dorset Downs lost nothing in the hands of Mr. Homer, of Atherhampton. The Leicesters were fully represented, and some Kents and Cotswolds made up a good show of longwools. There were mountain sheep from Scotland, and Roscommon sheep from Ireland. Amongst the most noteworthy were some Dorsetts with four horns, sent by Mr. Isaac Watts, of Devizes. I refer especially to these sheep, which excited considerable interest. Mr. Watts had a desire to produce his Dorset sheep with four horns, and whilst he was in South America he had seen some four-horned mountain sheep, and succeeded in bringing over a four-horned ram, and his first cross with his Dorsetts produced four fully-developed horns; and from putting this wild sheep again upon his own daughters, and breeding continually from only four-horned sheep, he has succeeded in establishing the type. One of the rams shown was a really excellent sheep of full Dorset character, and was greatly admired by all who saw him. I have mentioned this as another illustration of the influence of the male on external appearances. Altogether, considerable interest was excited amongst the French and other foreign agriculturists by our exhibition of sheep.

The pigs were a superior class, and the large white breeds were purchased rather freely by the French; but those most excellent pigs, the Berkshires, were almost ignored. This was somewhat strange of the French people, who have great objections to very fat meat, and did not seem to understand the great merit of the Berkshires, who have always plenty of lean meat with their fat.

Mr. Sexton's black and white Suffolks were greatly admired, and very deservedly had the premier prize. I have thus glanced at the live stock sent by the English exhibitors, and wish time permitted me to go more fully into detail.

In describing the French Department I shall take them according to their catalogue, and first on the list are their Dutch. I need not dilate too much on these, as they have become familiar to most of you as dairy cows, chiefly in the London sheds; almost all were black and white. The bulls were large-framed animals, but very coarse and ill-looking. The cows had large udders and very hard skins; they are deep milkers, but the milk is not rich. Next came the Danish, Swedes, and Norwegians; these were mostly a dark red, extremely thin, poor creatures, like very poor Alderneys; neat udders, but their backs like razors. Next were races from the centre of Europe. The bulls were large and massive, hollow rumps, and flat sides, good chins and backs, but very hard to the touch; in colour, light red and white, or more like what we should call dark cream and white. The cows did not

seem to be very great milkers. Then came the Swiss and kindred races; and, with the exception of the English, were the only foreign race exhibited. These were beautiful grey, or mouse colours, with dark muzzles, very hard skins, deep and massive, and the cows apparently good milkers. Following these were the Piedmontese, Romagnole, and Portuguese. The former were enormous animals, high on the tail, large heavy dewlaps, drooping ears, colour light grey and dun; they seemed very useful for draught purposes. Some, apparently, had been crossed with Shorthorns, and the cross was very successful; their hides had become more supple, and the bone smaller. The Fifth Class was for diverse races not comprised in the former list, and were chiefly crosses with our Durhams or their various native breeds; some had hit remarkably well. I think in this class the English exhibitors had a fair right to complain. The Duke of Buckingham's and Mr. Farmer's longhorns were placed in this class, and the first prize was given to one of the worst animals I ever saw exhibited—a cross-bred cow, with a broken tail; a short, contemptible animal with black horns, and not worth £20 in any market in England, and this against some of our best bred longhorns the kingdom could produce. This prize was awarded, I am told, without the knowledge of the English judges. The longhorns were admirable specimens, and the whole of the remainder of the class very bad indeed. The Second Division comprised first the Normandy, which were a remarkably fine race of cattle, colour nearly all red and brindled. Bulls, plain animals, with hard hides; but the cows were short-legged, large, fine beasts, with immense udders. The first prize cow was one of the finest animals I ever saw; she was a tall brindled cow, with a great but very symmetrical udder, a famous rib, and great substance, but somewhat coarse. She was a wonderful cow, and some of her class were nearly as good as herself. If ever I were inclined to cross our Shorthorns, it would undoubtedly be with such cows as these; a good Princess or Knightly bull put on to these cows ought to bring the perfection of a dry herd, or even the Flamande race, which came next in succession. These had great frames, very narrow over the chins, very massive, deep milkers, and in colour nearly all red. The bulls were coarse, but, singular enough, had good chins, thus differing from the cows. M. Bosse gained the work of art, valued at 2,500 francs, for the milking prize with this race. We now come to that famed race, the Charolais. They are extremely beautiful, but I could not perceive much utility in them; they had a bad touch, were very deficient in hair, and had but little milk about them. Their colour, a creamy white, and their general bearing and fine countenances, made them a most noticeable tribe. The Guernsey were a light dun, with thick heads, and a very inferior class; they were like large silver grey Jerseys. Following these came the Garroaise, which were a striking-looking class, of a dark cream colour, with heavy jaws, rather small, with short rumps, but good heavy thighs. The females did not seem to have much good milk about them. The females of the Bazadaise were very pretty, some buff coloured, others cream, and these races brought me to the Race des Pyrénées. The males shown from the Lourde district had beautifully curled and very handsome heads, again cream coloured, but with bad rumps, tails set up high, and hard skins. The Béarnaise and Basques were also pale buff, occasionally with buffalo-shaped horns. The Salers were the same colours, had flat sides, hollow backs, and high crests, but capital thighs. The Parthenaise were very grand animals, especially the bulls, but with hollow backs. All these, both male and female, were rich buff or grey in colour, and the females very handsome. The Tarentaise was very pretty buff and greys, with black noses and black horns. The Brittany cattle are well known in this country, being pretty little animals of black and white or grey in colour. There was a cow shown by Mr. Le Floch, from Finistère, equal to any little animal I ever saw, wonderful chin and good back, and beautiful udder. I must conclude my notice of the French breeds by briefly alluding to the Algerian and other kindred races. These were rich cream and cream and white colours, good hair, and capital thighs. This paper would not be complete if I did not mention the great strides the French agriculturists have made in breeding Shorthorns during the past ten years; many exhibited here would have been dangerous opponents in any showyard in England. The bulls, as a rule, were not so good as the cows; I must characterise them as evidently having been bred with a good form for the best



roasting men', as all had famous chimes, first-rate backs and loins, and excellent thighs, well let down to their backs. Two bulls were rather coarse in the bone, and had not that exquisite touch so much sought after by the English breeder; and the cows had not been bred for their milking qualities, but for sh-sh-forming purposes. It will be useless for me to mention their names and pedigrees, as they are entered with references to the French Herd Book, which differs in the numbering to ours. There was a tendency to loss of hair upon them, but their rich roans, deep reds, and general appearance, did no discredit to their breeders, and showed again how well the Shorthorn race adapts itself to all countries and all climates. Most unmistakably, this race, "Durhams," as the French call them, takes the lead now amongst all their classes. Several of their Durham crosses with some of their own breeds were exhibited; but it struck me that the best cross was with the Fémish or Fiamande, as there seemed plenty of milk, and good flesh on a large frame. I thus conclude my notice of the cattle, and will now, as closely as I can, pass on to the sheep. Amongst the Southdowns were some excellent specimens, bred in France; but the chief interest centred in the Merinos, there being over 250 entries, and numbering nearly 500 sheep. To us, as Englishmen, this race seems peculiarly ugly; but the great value of their fleeces, and their absence of fat, makes them the most favoured amongst the French sheep classes. Perhaps some of the finest of this race in Europe were exhibited here—many of large size—and every part of their frame, excepting a small portion of the face, even down to their feet, was covered with wool; but as there is a tendency of a demand for a longer staple of wool, they have found it advantageous to cross them with some of our longer-wooled sheep; but they do this very reluctantly, as they find our Lincoln, Cotswolds, and Oxfordshires get their mutton too large and too fat; for I find the Frenchman's chief glory of mutton is a good cutlet, and they naturally complain that we are obliged to cut off a large portion of fat from our necks, backs, and loins, which is wasted, and goes into the dripping-pan. They are extremely prejudiced in their opinions of our various breeds of sheep; and it is extraordinary how they stick to the old types that they saw for the first time many years ago, which were introduced from this country; and they never tire of speaking of "race Jonas Webb," and "race Dishley;" and the names in their catalogues of "Dishley Merino," "Dishley Normand," "Southdown Merino," "Southdown Berriehoune," "Southdown Dishley"—meaning our "Half-bred;" and "Dishley-artistiennes"—and "Southdown-canochoises" fill up a class numbering 160 entries, and more than 300 sheep. There were most excellent specimens of these crosses, and only three entries of Shropshires, and not one of Oxfords or other Downs, except Southdowns. There was one native breed called "La Charmaize," which were excellent—the ewes rather small, but all of high quality—those shown by the Comte de Montalivet I thought particularly good. I must give a brief remark on the pig classes, and am sorry to differ with many of my English friends, who thought the French pigs very good. I saw but few worthy of notice; the general run of their specimens were ugly brutes, long and coarse legged, with great lopping ears hanging over their eyes, and devoid of all the characteristics of what I consider a good pig should be. I do not deny there were some extraordinary good animals, but contrary to their views about mutton and beef, they seem devoted to the large, coarse Yorkshires, and cared but little for our small breeds; but their antipathy to the Berkshires is inexplicable, and it must be from ignorance of the merits of this breed, and scarcely a notice was given to them and to our choice little Essex breeds. More than three-fourths of their pigs were white, and if any superior animals were seen, they had evidently been crossed with our English breeds. Following my notice of cattle, sheep, and pigs, we came to "*Les Animaux de Basse Cour*," or, as we call them, "Poultry." A large collection was formed, numbering 1,755 pens; and as many were shown in threes and fours, and even larger numbers, there must have been over 4,000 head exhibited—518 pens of pigeons and 393 of rabbits. I shall not tire you with a lengthy description of these most valuable adjuncts to the live stock of a farm, as a rule so lamentably neglected by my brother farmers, and so strangely ignored as a source of profit; but as far as superiority of different races go, we English are far in advance of them in every particular. Our English judges can corroborate all I say; but as we had two judges only there—both eminent

breeders and authorities in this country—they were out-voted on all occasions when they stood up for the recognition of our superiority. We sent there nearly 400 pens, numbering considerably over 600 specimens, and there is no doubt the French saw plenty to astonish them; but as they have no standard of excellence whatever, and decide entirely by caprice, I do not wonder at the absolute inferiority of their poultry. I never was more astonished than I was at their ignorance of almost all which constitutes perfection in poultry. Was it beauty of plumage that was their object? If so, they failed. Was it uniformity of breeding? If so, they failed. Was it size they aimed at? If so, they utterly failed also, even their own noted breeds, such as the Bêléme Coqs and the Houdans. There were only four pens sent from England, against nearly 500 from France, and they all four obtained prizes. The main reason why the French are so ignorant of the proper points of the best varieties of our poultry is that the exhibitors are generally common poultry dealers, who show merely for trade purposes; whereas in England, most exhibitors take up the fancy as an amusement and from pure love of it, regardless of expense; and the result is an improvement in the various breeds during the last twenty years which astonishes everyone. The truth is, the French people feed and dress their poultry so much better than we do; as in England a fowl or turkey is sent to table oftentimes dry and tasteless, the same birds in France would be juicy, tender, and succulent. As a proof that the French do not over-value the products of their poultry yard, I find from statistics that during the year 1877 they sold for exportation a thousand million of eggs, beside supplying their home markets, which we know have extensive demands on them. The total value of eggs for exportation thus amounted to over £2,500,000 sterling. I have now but slightly glanced at the various breeds of cattle, sheep, pigs, and poultry at this great show, and must not forget its purpose—"its agricultural teachings." And first, as to judging, the system of awarding prizes appears to me most objectionable. The judges, so far as I could ascertain, acted more as reporters than adjudicators; for after delivering in their awards, these awards were revised by officials, supposed to be of a higher capacity and occupying a more elevated rank. This is a point that must be settled in future—viz., the position which jurors are to hold, before Englishmen again take part in any other exhibition in France. One other of the "teachings" of this show is that they classify their animals for various purposes—viz., for meat production, milk production, and for beasts of burthen and sheep. For meat production, and for wool production, we use our classification of the latter under the various heads of long and short-wooled sheep; but I think at our leading stock shows we might more generally adopt the classification of meat and milk-producing cattle. You may possibly have heard that an auction sale was to be held the day before the closing of the Exhibition: and it was generally believed that a large portion of the English live stock would be retained in France, as it was probable that all would be purchased by enlightened Frenchmen. The members of this Club will understand the position of matters when I state that Mr. John Thornton, who undertook to look after the interest of the English exhibitors at this sale, that with all his well-known assiduity and energy he was unable, as far as I know, to command a single purchaser by auction. One would have supposed there would have been no lack of enterprise amongst our intellectual neighbours; but I regretted to find they had no appreciation of our careful selection of animals for breeding and do not take into consideration the distinguished lineage of our choicest pedigrees, and the freedom from the chaos of transmitting inferior blood through the germs which modern physiologists maintain are stored up in the system of animals of short or inferior pedigree. It was utterly surprising to me that so intelligent a people as the French as questionably are should have lost the opportunity which this fine display offered them of obtaining possession of such materials for improving their own races. Show as the English bucolic mind is said to be, I have not the shadow of a doubt there would have been the keenest competition for the possession of such animals. Nothing can show more conclusively the slowness of the French proprietors and agriculturists to avail themselves of this splendid opportunity than the fact that they allowed many of the choicest specimens of cattle, sheep, and pigs that England could produce to be returned home, although offered at little over butchers' prices. This was

were exemplified in poultry than in cattle, as you could not make them believe our specimens were worth two to five guineas each; and I saw several of their own exhibited birds sold by auction after the show at two and three francs each, not making as much as a common fowl or duck would make at any country market in England. Not so the Germans and Austrians; as I sold nine pens of poultry at large prices to a German count, and seven pens to go to the neighbourhood of Vienna, and only one to France, and that was to an English lady; and, excepting a few game cocks, I do not believe half a dozen pens of English poultry were sold in France.

With respect to the condition in which animals should be shown, I think we have something to learn from the French. Neither in the show-yard nor the market will they tolerate the indistinctly over-fed animals which find favour in England. The question arises are they *right* or *wrong*? *I hold they are right.* If you agree with me, what is the remedy? In the first place, the judges in our show-yards must show by their decisions their determination to discourage such over-feeding. So long as the highest-fed animal stands the best chance— unquestionably it does—of carrying off the honours, so long will he loading of the animals with fat still continue; and the exhibitor who vainly supposes that he can carry off a prize with the best animal in a fair state will be disappointed. And the result of setting this fashion in our show-yards has been to create a tendency in the favourite breeds to lay on fat instead of developing the milking properties, and such meat as the butcher finds most saleable. My remarks upon the exhibition of live stock will not be complete without alluding to the outbreak of foot-and-mouth disease, which we unfortunately brought away with us on our return. We came back by the same route, via Boulogne, and on our entering the Thames we were informed that Brown's Wharf at Poplar had been fitted up for us as a quarantine establishment, and we landed the whole of the cattle, &c., before 3 o'clock on the Friday afternoon, June 21; and I visited the place on the Monday following, in conjunction with the inspector of the Privy Council; and after a careful examination the two Sussex bulls belonging to Messrs. Stanford were found to be infected, and evidently of more than a week's standing, as the disease was passing off; and I then learned that one of her Majesty's Shorthorns had been left behind in Paris with unmistakable signs of the disease, showing that it must have been engendered there. It will be too long a story to tell you of the great trouble and anxiety this caused us all, as after every fresh outbreak we were bound to remain another fourteen days in quarantine; it was thus several weeks before the place was declared free from disease. Lady Pigott lost one of her finest cows; and several others, myself amongst the number, had their cattle and sheep slaughtered, and their carcasses sold at poor prices, rather than risk the chance of bringing back the disease into their own neighbourhoods. It will, perhaps, greatly surprise you to hear of the enormous cost of this quarantine to the exhibitors. I have been to some pains to arrive at this amount, and find the standing alone cost us above £275, which went into the pockets of the General Steam Navigation Company, who are the owners of the wharf, and who fitted up the place in a very rough way; and with forage, various charges, and men's expenses of attendance, the amount was over £1,000! I mention these facts, as it has been often thrown in our teeth, as farmers, that we would resist the heavy burden if ever we should be placed in the position of the foreigner in this matter. What we do complain of is, that there should have been no place provided for our reception by the Government, and I think it very hard that the heavy charges made for the *standing* of our animals should have fallen upon the exhibitors. I more especially allude to this, as it is proposed to admit foreign cattle to compete with ours at the great show of the Royal Agricultural Society next year in London. It is not foreign cattle we fear, but foreign *disease*. I have written so fully on the live stock that I cannot possibly do otherwise than speak but slightly of the Agricultural machinery. In looking through the French Department an English farmer has to inquire, and to make far more inquiries, as to the purposes for which the machines were intended, than he would have to do in an English showyard. The French people in tillage, as well as in other operations on the farm, seem to me to have a peculiar method or gift of going in a roundabout way to accomplish the end in view; and I could not but notice that their imple-

ments and machines had not that obviously direct purpose which I find in England. I think it was Sir Joseph Whitworth who once said: "The machinery of a nation would naturally correspond with the wants and intelligence of its people; and so it is with the agriculturists of a nation, because the better the machinery will become with which they are supplied. It will, therefore, be needless for me to enumerate the splendid show of implements sent by all our leading makers, whose names are household words amongst us; sufficient to say, they far surpassed every other nation, and I showed what enterprise the British agriculturists possess, and what success has attended the manufacturers of such a magnificent display. The general teachings of this world-wide show were that we have little or nothing to learn from our French neighbours, nor any other nation which exhibited there—especially from France, where their small holdings, the custom of breaking up properties, and the general desire and aim of the generality of their people when they have gained wealth to gravitate to the large towns, keeps agriculture too much in the back ground. But the thriftiness of its people, and in some parts of France the cleanliness of their farming, is a pattern for many British farmers. The French are becoming, very much more than they used to be, a meat-eating people, and a very extensively beer-drinking people also; and I feel sure, with their increasing knowledge of the superiority of English live stock, a considerable trade will spring up for our best breeds of all descriptions of cattle, as also for our best samples of seed corn. We have nothing to fear from Continental agriculture; and, after all I have seen at foreign agricultural exhibitions at Altona, and especially at Vienna, as well as at Paris, I still feel proud of

"This precious stone set in the silver sea,  
This blessed plot, this earth, this realm, this England."

Mr. COLEMAN (Ricill, York) who rose, after a pause, in response to a call from the Chair, said, having had an opportunity of seeing that wonderful exhibition of cattle at the Paris Exhibition, upon which they had had such an admirable report from Mr. Fowler, he must declare that he was exceedingly interested and surprised. One lesson which it taught them was the great variety of the resources of a country which could produce so many different descriptions of cattle, each, no doubt, being especially suited to the particular conditions under which it was bred. He did not entirely agree with Mr. Fowler in his rather depreciatory remarks respecting the Charolais cattle. He supposed that such an authority was perfectly correct in stating that the milking properties of that breed of cattle were not very good; but as beef-producers and as working cattle—a purpose for which they were very much used—they stood very high indeed. He thought that English agriculturists might take some credit to themselves for the present condition of those cattle, because the Charolais cattle, and especially the Charolais Nivernais breed, had been often crossed with their Shorthorns, many of the male animals in the herds having a head which was very suggestive of the English Shorthorn cattle (Hear). Mr. Fowler had alluded to the splendid display of agricultural machinery which was contributed by the leading English exhibitors. Up to the present time England had shared with America probably the bulk of the export trade into France; and he regretted, for the sake of the English manufacturers, that it was the opinion of one of the largest agents in France, both for English and American machinery, that so great and progressive had been the advance recently made by the agricultural machine manufacturers of France that in ten years his business as agent would be extinguished, and he must look out for some other occupation. He thought that the demand for English machinery would probably by that time have ceased. He regretted very much to hear that expression of opinion. Although, after having gone, somewhat rapidly, through the Paris Exhibition, he thought that in construction and quality the French machinery was very inferior to their own, yet, on the other hand, he must say that it seemed to him there was an adaptation to the wants of the French farmers which was very creditable to the leading manufacturers, and that the machinery generally was much better than he had expected to find it (Hear, hear). He did not think the English should give place to any other nation as regards the merits of their machinery, but he would have liked Mr. Fowler to have said on one or two words commendatory of the American section (Hear, hear). That section was small, but it was remarkably

good (Hear, hear). Among the foreign implements the American had perhaps been more largely used in France than their own, and that was perhaps owing to their being of somewhat lighter construction. The agent to whom he had just alluded told him that some of the American machines sold very readily, and that he had a great deal of trouble in selling English machines. It was certainly not well for them always to imagine that they were so superior to others (Hear, hear). Having been in America, and having also visited the Paris Exhibition, he had seen a great deal of the American machinery. He must say it had appeared to him that a word of acknowledgment was due in regard to the admirable collection of American machinery recently seen in the French capital (Hear, hear).

Mr. JACOB WILSON (Woodhouse Manor, Morpeth), said he, like his friend Mr. Coleman, had come there fully intending to be only a listener, but after what he had heard he would say a few words. He must first remark that a more interesting subject could not have been selected for discussion that evening, nor could it have been entrusted to anyone of more practical knowledge and experience than Mr. Fowler, to which he would venture to add that it must be the opinion of all who heard him that that gentleman had treated his topic in a very exhaustive manner. Like his friend Mr. Coleman, he could not concur in all the conclusions drawn by Mr. Fowler. He thought it was a very dangerous thing indeed to assume that they had nothing to learn from their French or Continental neighbours (Hear, hear). He most freely admitted that they might learn from them very considerably in many ways, especially with regard to little matters of detail connected with the arrangement of the show-yard. Perhaps that was a subject which did not much interest that meeting (Cries of "Oh yes"). It was an element in which he felt personally considerable interest, and he knew that many of them, having a proper regard for their own comfort and convenience, fully appreciated its importance (Hear, hear). He was rather surprised to hear Mr. Fowler speak depreciatingly of the Charolais cattle, because if there was one element more remarkable than another in that department of the Paris Exhibition it was the beautiful white cattle (Hear, hear). And they might depend upon it that as the French became a more beef-eating people that breed of cattle would be developed more than any other, probably with a cross of Shorthorns upon it (Hear, hear). So very important was that mixture considered in France that Frenchmen, in buying Shorthorns in this country, made it a point that there should be three or four crosses of white animals. As a breeder, he looked with astonishment at the Shorthorn exhibition in Paris. He maintained that many of the animals bred in France were fit to compete with a large portion of those bred in this country, and he hoped that if matters went on well in the interim, if there were no disease prevailing on the Continent, and proper securities were provided for the protection of English stock, the managers of the exhibition next summer would be able to show English exhibitors that they had very formidable competitors on the other side of the water. He would not occupy any more time on that subject, which was completely exhausted in Mr. Fowler's paper; but he must remark that he sympathised very much in what Mr. Fowler said with regard to the French system of judging by means of juries, involving as it did the practical question whether that system was adapted for this country, either as regarded poultry or cattle. He thought that anything more absurd and unsystematic than that system of judging could not be devised (Hear, hear). It really came very much to a question of judging a country independently of the stock—(Hear, hear)—and although he would be the last person to say anything derogatory of his late colleagues or of his friend Mr. Aylmer, and others, who had on the whole treated the matter in a very excellent way, still he must say that there was a want of that practical system of judging which was found to prevail in England. He could only point to the cause by saying that the judges were not selected from a practical class of men corresponding with the judges in this country. They appeared to be representatives of large proprietors, who might perhaps understand form but had no idea of handling, and he thought Mr. Aylmer and others, who knew what occurred, would bear him out in taking that view. Probably one man's eyes were as good for judging as another's, but there were few persons with practised hands, very few persons who knew what real flesh and quality were, or what

was to be found in the best meat-producing animals (Hear, hear). He had learnt from the Paris Exhibition that the French system could never be adopted in England. He had learnt also that they knew how to arrange for a good show; and, further, he had learnt that they knew how to entertain their visitors (cheers).

Mr. G. STREET (Malden, Amphil), said it was an axiom of his father's, and he thought it was a very good one, that you might learn something wherever you went. He was an old-fashioned farmer, and in looking at other people's farming he saw something to copy and something to avoid. It was with that kind of feeling that he himself went to Paris. The very first thing which struck him on entering the show-yard was the admirable arrangements made for the show (Hear, hear). The buildings erected for the beasts, the sheep, and the pigs were far superior to any that he had seen in England, and he thought a similar conclusion was arrived at by the English exhibitors and visitors generally (Hear, hear). The arrangements of the buildings were exceedingly good. You could pass up one side and down another, feeling that, with the catalogue in hand you could follow out first one class and then another, and that there was full provision made for avoiding any danger of contagion as between English and foreign stock. For instance, the English sheep were put on one side and the French on the other, and the beasts were placed between the two. In that respect everything was admirably arranged. Again, it was a noteworthy fact that the French took care of the English shepherds and herdsmen, and he thought that ought not to be lost sight of. The French did what he never heard of Englishmen doing when foreigners had come over here under similar circumstances. They ascertained what number of shepherds and herdsmen were coming, and they had made full provision for them. He did not know how much they were indebted to their friend Mr. Fowler for the carrying out of the arrangements, but he supposed that he had something to do with it. The men were all supplied with sandwiches and ale on their arrival, more substantial fare than sandwiches being, he believed, afterwards provided for them; and instead of having to look for places to sleep in they found capital arrangements for that purpose, bed-rooms being provided, beds laid out, and every possible convenience which was required for their accommodation. The men showed that they appreciated what was done for them. One of his own men, at Paris, came up to him with a beaming countenance and said "They treat us all uncommonly well; the other day half of us had tickets given us to go to the Exhibition, and the next day the rest had tickets to go there, and a guide was sent with us." The shepherds and herdsmen as a body were certainly well treated, and well supplied with food, and in that respect everything was very satisfactory. Let him now turn to another side of the question. Mr. Jacob Wilson had alluded to the judges, and he quite agreed with Mr. Wilson on that point. Although he was fortunate enough to secure some little success at the Exhibition, yet, when he saw that it took about half-a-dozen Frenchmen, with two good Englishmen, to do in four days what one good Englishman could do in a day, Sunday being one of the four days, then he thought he saw something in the system of judging to avoid. He believed that on the first day the judges began about the middle of the day. They looked over a class or two, and then they thought they had had enough of it (laughter). They said, "Well, to-morrow we will go to work early." They began early in the morning, and did a little work. About twelve or one o'clock they said, "Now we must go to breakfast." The English judges were sauntering about, and even if they were not inclined to smoke, had nothing else to do because their French colleagues were at breakfast. About two hours after the work ceased they learned, perhaps, that their colleagues were still at breakfast, and the result was that very little work was done that day. On Saturday, after most of the classes had been got through, the French judges said, "We must leave the champion classes till to-morrow." Of course every English judge objected to anything of that kind being done on Sunday; but their French colleagues replied, "Well, if you don't work with us we shall have to do it by ourselves." Under these circumstances the English judges said, "What are we to do? The question is not one which merely concerns our own interests; the interests of our countrymen and the honour of our country are

at stake;" and the result was that very many of them yielded and consented to act as judges on Sunday. There was one judge—he was, he thought, a Scotchman—who stoutly refused, saying that he was not accustomed to that sort of thing in his own country, and he would not have it there; and he (Mr. Street) was not aware that the exhibitors of pigs suffered in consequence. In that case the judges waited till Monday morning; and the champion prize was obtained by an English exhibitor. With respect to the remarks made by Mr. Fowler respecting the French cattle and sheep, his own feeling was that they must have astonished any visitor who had not seen French cattle and sheep before; and he had no hesitation in saying that the Shorthorns, and other classes of animals, to which allusion had been made, surpassed anything which he had supposed likely to be produced in France (Hear). As regarded sheep, he thought their display of Southdowns was exceedingly creditable to the French exhibitors. If the English judges had stood aloof, and refused to do anything on Sunday, the champion prize in that department could probably have gone to the French Southdowns. He repeated that his own impression was that the display of English Southdowns was a most creditable one, and he could only wish that the exhibitors had nothing to reflect upon more strongly than what they met with in Paris. He considered that those who were not fortunate enough to sell all their animals in France had strong ground for complaint. He had some hesitation in speaking on that point, because he must necessarily speak personally. His brother and himself had four sheep each on sale. He had one shearing ram, which was selected by the French jurors as the best of the lot, their opinion being, however, over-ruled by that of the English jurors. He had also three shearing ewes—shearing ewes which for breeding purposes were quite equal to his commended lot of thieves. Further, his brother had a favorite ram and three ewes. Those eight sheep were put into quarantine. Directly his brother heard of the enormous charges made at Brown's Wharf he gave instructions to Mr. Judkin to have his animals killed, and wrote to him from London asking him for his opinion about the matter, the result being that he (the speaker) wrote to Mr. Judkin—"Have my sheep killed too." Notwithstanding the prompt measures which were taken, the charges were found to be so heavy when these eight sheep were killed, only about one shilling per head was left after deducting expenses (Hear, hear). When he told them that he himself made a special journey from Bedfordshire to Brown's Wharf on account of those sheep, and that his brother lost two or three days over them, they might easily imagine that the matter was anything but profitable or satisfactory. Although he was fortunate enough to get an exceedingly nice medal at Paris, yet he could not help feeling that even gold might be bought too dearly, or might be sadly tarnished by the manner in which one was afterwards treated by people at home. Lest he should be misunderstood, he must remark that their own representatives in Paris—the Prince of Wales, who made himself deservedly popular in France, Sir Cunliffe Owen, who, next to His Royal Highness, was the most popular Englishman connected with the Exhibition, Sir Brandreth Gibbs, and Mr. Jacob Wilson did everything that it was possible for Englishmen to do to promote the interests of exhibitors.

Mr. J. TREADWELL (Upper Winchendon, Aylesbury) said as one of the exhibitors at Paris he failed to see what the gentlemen who had just sat down would require as regarded quarantine here for foreign animals. They all knew that quarantine must be expensive, but he felt very thankful that his animals and others when brought back had to go into quarantine and were thus prevented from spreading disease over the length and breadth of the land (Hear, hear). The Paris Exhibition had taught him that if they took animals to any foreign country they must take their chance of contracting disease. English farmers were led to believe that France was healthy, but somehow or other disease got into the showyard and was brought to England, and he repeated that he was very thankful that our own country was protected by means of quarantine. He rose chiefly for the purpose of asking the authorities of the Royal Agricultural Society to see that proper quarantine precautions were taken before foreign stock was allowed to enter the showyard of the Exhibition next summer, and to mix with their own. It would be the greatest misfortune to them if disease were to break out in the show-

yard in the neighbourhood of London. It must be borne in mind that in that case their stock would all be locked up for a considerable time. It was bad enough to have it locked up as it had been at Blackwall, but that was nothing to the evil of having it locked up at the showyard in London. For his own part, he must say that he viewed with a great deal of alarm the prospect of the International Exhibition next summer. He was not quite sure that he should exhibit there, although he had been a constant exhibitor at the shows of the Royal Agricultural Society; but he hoped that the council of that society would take such steps as would drive away all such fears as he had expressed, and enable all to exhibit with safety. They all knew that the quarantine at Blackwall was a very expensive affair; but all the arrangements had to be made and everything had to be put up hastily, and he saw no reason why those who had to make all the preparations and to keep men to take care of the animals should not be repaid for their outlay and trouble. The result was in many cases unfortunate. It would have been much better perhaps for many exhibitors if their animals had been thrown into the Seine at Paris instead of being brought home; but that was a thing which could not be foreseen, and he did not think they had quite as much reason to complain as some appeared to suppose. With regard to the agricultural teaching of the Paris Exhibition he did not quite agree with Mr. Fowler in what he said about prizes not being given for fat animals (Hear, hear). They all knew that in England there was no use in sending an animal to a showyard without some fat upon him, because if animals were not fat it would be impossible to tell that the owner had not tried to fatten and had failed in the attempt (Hear, hear). In that matter they hardly knew, in fact, where to draw the line, at least he did not know where he would draw it. Of course if an animal were so fat that he could not carry his carcass, that was another question, but short of that he really should not know what ought to be the limit. He did not think they had much to learn from the French as respected style of living. The French nation wanted lean meat without any fat, but that was not a tempting kind of meat to Englishmen, and if he lived in France he would like to see a little more fat put upon the animals which he helped to consume. He liked the way in which the Paris Exhibition was prepared for, and he agreed with Mr. Jacob Wilson that in the arrangements of the sheds there was a good deal that might well be copied at the shows of the Royal Agricultural Society. No doubt the French did things of that kind much cheaper, and in some respects better, than they had been done here. Probably they might learn from what they saw at the Paris Exhibition how to make improvements in the arrangements for their own exhibitions, but he did not know that there was much more for them to learn.

Mr. JAMES HOWARD (Clapham Park, Bedford), being called upon, remarked that as the paper had so exclusively dwelt upon the cattle department, and as he had seen so little of that department, he did not feel in a position to discuss it. He, however, had seen sufficient to convince him of, and to enable him to bear testimony to, the great advance which the French had made in the production of beef and mutton and of milch cattle since the year 1855, when he first visited a cattle show in the country. He had had many opportunities since then of attending both their breeding and their fat stock shows, and the progress which they had made had been certainly most remarkable (Hear, hear). Although, upon the whole, there could be no question of the very great superiority of English agriculture over the agriculture of France, or perhaps any other portion of the Continent, yet he could not endorse the opinion expressed by Mr. Fowler that the English farmer had nothing to learn from the French farmer (Hear, hear). On the contrary, he thought that if Mr. Fowler had visited some of the French homesteads, and any other English farmer who paid a visit to Paris had done so, they would have been very much struck by the order and regularity displayed by many of the French farmers, particularly in the management of their dairies (Hear, hear). He (Mr. J. Howard) had had an opportunity of visiting a few of the best homesteads in France, and of inspecting the daily management of the dairies and he had been very much struck with the precision which was there observed. Every ounce of food of every animal was weighed daily and accurately entered, and the produce given in milk by every cow was tabulated daily on a slate. And he thought it no small matter when a French farmer at the end of the year was able to tell what every cow

had cost to keep and what it had yielded in the shape of produce (Hear, hear). He knew very few English farmers who could do anything approaching to that precision. There was another lesson which they could learn from the French, viz., the order and neatness of their homesteads, and in the greater care which they took of expensive agricultural implements, which they bought very freely. Perhaps his brother, whom he saw opposite, would rise and say that that was a point in which his (the speaker's) own homestead did not particularly shine, but he would forestall any such observation (laughter). [Mr. Charles Howard: Then I have nothing to say.] (laughter). [Mr. James Howard then continued.] He did not mean to say that every French farmer deserved that commendation, but in the main, when the homestead of a respectable and intelligent farmer in France was visited, the greater order and neatness would be found displayed. There was yet another point in which the English farmer might learn something from the French farmer. Those English farmers who had walked through the French agricultural implement department would have been naturally struck by the large number of huge ploughs with their mould boards as high as a table, and they would naturally inquire what those implements were required for. They were very extensively used on the great beet-root farms by bullock teams in deep tillage for root crops. The French farmers paid more attention to depth of tillage for their root crops than any English farmer with whom he was acquainted. (Hear, hear). They devoted as much attention to this matter as we did to the quantity and quality of the manure applied to the ground. Many of the members of that Club would be astonished at the enormous crops of beet-root which the French managed to grow. Then there was another matter in which it had always struck him we were behind the French, and that was education. He did not mean to say that they would find the peasant class of farmers in France superior to our own in the matter of education; but it would be perceived that there was a much larger proportion of farmers in France who understood the theory of agriculture, and who could converse upon the science of most of the departments of farming. That class of men would be found in much larger numbers in France than in England. The French Government had devoted considerable sums of money for many years past for the purpose of teaching theoretical agriculture. It was not for him to canvass its advantages or otherwise; he merely stated that which he believed to be a fact—namely, that there was a much larger proportion of farmers in France who were acquainted with the science of different departments of agriculture and pastoral affairs than were to be found in England. Upon the whole he did not think the Paris Exhibition was likely to have much influence upon the farming of this country (Hear, hear). He thought we had learnt very little by the Exhibition proper; however, a very singular outcome of the Exhibition was that it had put England into the possession of a most valuable series of papers upon the law, the chemistry, the taxation, the practices, and the history of its own agriculture. (Hear, hear). He thought that the memoir presented by the Royal Agricultural Society of England to the French Agricultural Society was calculated to do a vast amount of good (Hear, hear). Although practically we might not derive any very marked advantages from the French Exhibition, he thought that those papers were calculated to confer very great benefit upon the agriculture of our country, and were worthy of a careful perusal by every member of the Club.

The CHAIRMAN said that several complaints had been made by Mr. Fowler, Mr. Street, and Mr. Treadwell as to the way in which the cattle were treated in quarantine; but there seemed to be but one opinion about the desirability of taking care of the cattle, and every one appeared to feel that they should not be brought into this country to infect our flocks and herds (Hear, hear). Not only had their animals been taken care of at Brown's wharf, but the owner appeared from the heavy charges exacted to have taken too good care of himself. There certainly ought to be some means provided whereby persons obliged to put their cattle into quarantine should be able to have those cattle taken care of at less cost. He mentioned that, because it might become an important question at the International Exhibition next summer (Hear, hear).

Mr. DENT, in his address, said that, having paid a short visit to the agricultural department of the Paris Exhibition, he had been desirous of hearing what Mr. Fowler had to say on the subject. He did not quite concur in all the observations in the paper, and he thought that English agriculturists might learn a great deal, perhaps not from the Paris Exhibition, but from the agriculture abroad (Hear, hear). Previous to 1877 he had not travelled abroad for twenty-five years. At that period he went through France and part of Northern Italy, and he was then struck with the fact that at nearly every hotel he was able to get a good supply both of milk and butter (Hear, hear). There was scarcely an English or a Scotch hotel where one could get anything like a plentiful supply of good milk and butter like that which could be obtained abroad. That was a fact which English farmers and English hotel keepers might study with advantage; because in these days of temperance we were told by medical men that there was nothing so requisite and as refreshing and good for humanity as a plentiful supply of pure milk (Hear, hear). He thought that English farmers, to a very great extent, did not cultivate the production of milk in the way that that foreign farmers did. He had not had much opportunity of going about and visiting the farms in France, and most of what he saw was chiefly from the rail-road, but he was perfectly astonished to perceive such admirable cultivation of the soil in many parts of France, and to observe the cleanliness which prevailed. He saw more weeds in the one day's travelling in the neighbourhood in which he lived, in the north of England, than in the whole two months that he was travelling abroad. That, perhaps, partly arose from the small number of hedges abroad (Hear, hear). He had not had the opportunity of seeing the implements taken care of abroad, but he had seen many implements neglected at home (laughter). When Mr. James Howard was referring to that point he (Mr. Dent) thought of the half-dozen implements—the Cambridge roller, the turnip cutter, and the grass-cutting machine—which he had seen left in the state and in the place where they had finished working. With respect to poultry Mr. Fowler said that the French did not appreciate his beautiful poultry; that they did not understand the feathering or the shape; but if they did not understand the making of shape, they contrived, besides having a good lot for the people to eat, to send a very large quantity of poultry and eggs to this country (Hear, hear). That was another source of profit. Perhaps they were small profits, but in the present hard times he thought we should look to small as well as large profits if we wished the agriculture of this country to be successful (Hear, hear). There was another thing he wished to mention. He was immensely struck by the beautiful foreign Shorthorns. He was not a breeder, but he had seldom seen anything in a Royal Agricultural Show better than the Shorthorns he had seen at Paris. He had spoken to many of his breeding friends on the subject, who said the French cattle had no pedigree, and mentioned several bloods which were wanting. He was, however, not sure that in the Shorthorn world blood was thought too much of, and possibly the high prices asked for Shorthorns, because they had a beautiful show of blood, and because they were descended from certain animals, was one reason why the French did not buy the English cattle—a matter of which complaint had been made that evening. They did not like to give such extravagant prices, and they may have thought that they could breed as good animals as any in the English show-yards. Some alarm had been expressed about the exhibition in London next year. He confessed that he saw a wonderful show of French cattle at Paris, and there was a great uniformity of type amongst them. He wished that there might not only be an exhibition of our English breeds next year, but that we should also invite our hosts to come over and show us what they had got, and then Englishmen who had not been able to go to Paris could see those cattle in this country. But when he heard what had been said about the quarantine he was afraid that the French would not bring many of their cattle here, if they were charged what gentlemen said had been charged at Brown's Wharf. He trusted proper precautions would be taken against disease, and at the same time arrangements made to enable the English producers to see something like what the French breeds were. He must confess that he did not come back from his little excursion with the impression that English farmers had nothing to fear or

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## FARMERS AND THEIR MEN.

The following letter, from Mr. W. Bulstrode, of Cookham Dean, Berks, has appeared in the *Standard* :—

The tyrannical, exacting landlord, the brutal, grumbling farmer, the helpless, down-trodden labourer, may serve well enough to point a speech or furnish a caricature, and specimens of each may, no doubt, be found; but exceptional specimens are not the representatives of a class, and if we really want truth instead of sensation we shall find it easy enough to get facts.

The mystery which once attached to the agricultural classes has been dispelled; the labourers' wages, perquisites, and grievances, the farmers' profits, balance-sheets, and misdoings, the landowners' liabilities and rent rolls have all been dragged to the light and exposed to public scrutiny and criticism. And what has been the result of this searching investigation? Why, Sir, it has proved to the public what the farmers well knew before, that at the present time the labourers are well off, the farmers losing money, and the income of the landlords likely to be seriously affected.

The spectacle of a body of farm labourers, each with an income of £50 per annum, marching up to London and appealing to the sympathy and charity of men far worse off than the *themselves* was as contemptible as it was ridiculous. The fallacies and falsehoods by which such absurdities were once supported have exploded.

Allow me to state a few facts, which I challenge practical men to disprove if they can. When you hear of 14s. per week it means that a labourer's place is worth £53 per annum. When you hear of a poor fellow having to support himself, a wife, and eight or ten children on 14s. per week, it means in very many cases, that the income of the family is from £70 to £100 a year. When you hear of the fifteen hours of hard incessant work under a broiling tropical sun, it means twelve hours' work, with seven pints of beer, and plenty of time to drink and enjoy it. And when you hear of the wretched pittance in winter, it means that young fellows of 18 or 20 who have drifted into farming with hardly any training and a corresponding knowledge of farm work, and old men of 70, unable to do a day's work, are, like their more able-bodied and competent fellow-labourers, receiving 14s. per week for 8½ hours a day, spent at what is called work. It is perfectly absurd, in these days of telegraphs, penny newspapers, and cheap travelling, to talk of men being tied to the farm. If they are dissatisfied, what is there to prevent them giving their employers a week's, or even a day's notice, and carrying their labour to another part of England, to another occupation, or to any other country of the world? I do not pretend to deny that a man with a wife and eight children, all unable to earn a penny, has a hard time of it; but I do say that he is not more to be pitied than the poor curate, the poor clerk, or the little shop-keeper, whose quivers are as full as his.

It is not reasonable that single men and family men should stand on the same pecuniary level, but I cannot conceive why the single man should be expected during his years of single blessedness to spend all his earnings on himself instead of laying by something for future needs; nor why the farmer who employs 20 men should be bound to pay such wages as shall, or might, comfortably support and maintain 200 of his fellow-creatures. Let me add a word here on behalf of the real, honest, thorough English labourer—a man who in general knowledge and general fitness to take his place in the world and fulfil the duties attaching to his position, will compare favourably with workmen in any other class. I have had and have experience of many such in my own and other counties, and I have learned to respect them. It is not from such that the discontent and agitation arises. They know as well as their masters that their position will contrast favourably with that of the unskilled town labourer, and they know as well as their masters that a nominal wage of 14s. per week, with a nominal rent of 1s. 6d. per week for a good cottage and ample garden, is not lightly to be thrown up for a single room in London at 5s. per week and the privilege of having to pay for every dish of vegetables out of their earnings.

Now, Sir, for the farmer. With good wheat at 46s. per quarter, rents higher than they were thirty years ago, and labour costing on an average £50 a year per man, it needs no

elaborate calculation to decide upon whom the burden of bad times falls, nor does it need a prophet to foretell that a most important change cannot be far off. Free trade in corn has been a vast blessing to the country; but at the present moment the burden of that free trade rests almost entirely on the farmer, and it is surely and steadily overpowering him. It is easy for outsiders to talk of the need for energy and enterprise, but energy is seldom found in persons suffering from decline, and enterprise is not most judiciously exhibited by sticking close to a sinking vessel. The great question before us is whether the present position of the farmer is but a passing depression, or the natural result of the operation of free trade. If, as I believe, the latter is the case, and if, as is generally accepted, this free trade is for the good of the country, our course of action is not difficult to decide on. We cannot increase our returns, therefore we must diminish our expenditure. There are numerous practical minor alterations in cropping and grazing which will affect exceptional cases, but the broad fact will still remain as I have stated. Now, the two great items of a farmer's expenditure are rent and labour. Rents must fall, but the fall will take time. Labour must follow the inexorable law of supply and demand; the price of that, too, must fall, and this fall may be immediately enforced, but, unlike rent, it may rise again, even in spite of a continuance of low prices, if the supply, owing to emigration or other disturbing causes, prove unequal to the demand. Rents will, however, prove to be the case, the depression in rents will be proportionately increased.

Turning to the landlords. Is it reasonable to suppose that while they can obtain the rents of the past from good and substantial tenants they will come forward in a body and suggest reductions? Does any one imagine that the interest on capital invested in land is so excessive that the consciences of the landlords should prick them on the score of usury? Most assuredly not. The resistance must come from the points of pressure, and if, as I hold, the operation of free trade is the cause of our low averages, nothing can prevent the downward course of rents.

For good or ill, the feudal relationship has been superseded by the commercial one, which the example of many of our merchant princes conclusively proves need not be a hard or unsatisfactory one. Landlords, especially in poor, or purely corn-growing lands, must be content with lower rents. Farmers must make their calculations as commercial men, and have the sense and spirit to act upon them in their arrangements with both landlords and labourers. Labourers must accept the wages fixed, not arbitrarily by the farmers, but by the far more potent and unyielding law of supply and demand in their native country—or resolve to emigrate, a resolve which has proved the first step to fortune with some, but with many others has aptly illustrated the well-known proverb of "jumping out of the frying-pan into the fire."

**THE PARSON'S GRATES.**—Mr. Mechi, Tiptree Hall, Kelvedon, writes to say that some idea may be formed of the discontent with our present system of warming from the fact that I have received in ten days more than 1,000 letters complaining of insufficient warming, and requesting instructions for constructing the parson's grates. The letters still continue to come at the rate of 70 or more per day. I would venture to suggest that these grates are especially desirable in railway stations, board-schools, and other large areas, for they can be inexpensively adapted to the agricultural labourer's cottage or to rooms of large dimensions. I speak from more than twelve months' experience of their use. For a room 30 feet by 20 feet a grate 24 inches wide and 14 inches high would give a superabundance of heat, and its cost, including setting, need not exceed about £3. If required for richly furnished rooms the ornamentation might be costly, according to desire. At present our railway stations are cheerless in winter. Not only do we get much more heat for a like quantity of fuel, but the cost of attendance is considerably less. As at present constructed the heat is carried up the chimney instead of being diffused in the room. The drying effect of these grates is surprising and especially valuable in country districts during the moist cold season. Instead of drawing the outside air through every crevice, as is done by the strong drawing registers, these grates heat, dry, and expand the air which is in the room, so that one feels warm all over. All applications for instructions as to construction should be accompanied by a postage stamp."

## FOREIGN AND BRITISH WAGES—FARMING.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—If the English Press performed its most obvious duty to the public, the returns you have collected of the wages of agricultural labour would appear in every journal throughout the empire. The exterior community have yet to learn that "oppression" has to be translated into 28s. per week; and that "down-trodden serfs" is a paraphrastic euphuism for an annual income ranging from £59 to £120. Hard as is the lot of the Clerkenwell Green pilgrims and the forlorn victims of Exeter Hall, the time is, perhaps, not far distant when foreign competition may drive the sons of the spindle, the blast-furnace, and even the trowel back upon the plough. India muslin and Nankeens long ago proved what the spinners and weavers of the east *could* do. The recent discoveries of coal in the various presidencies, the extended culture of cotton, the erection of English machinery, and the application of British capital, show what Hindostan is doing. Manchester must prepare to look in the face two hundred millions of workers, quite as capable of spinning and weaving as men in Lancashire who are paid five or six times their wages. How long will the textile industry maintain its supremacy amongst us against Bombay and Madras—already busy with their many thousands of spindles—and America, even now to be found in every London draper's shop? Within the year India has sent £717,000 in value of piece-goods to Manchester, and has progressed so rapidly in spinning that she exported 7,926,000lb. of twist in 1877, and nearly as much in the first six months of the present year. In iron and steel fabrics Sheffield, indeed all Britain, is invaded by Belgium and the United States. Ask our visitors to the Paris Exhibition what they think of the American watches and Canadian sewing machines. In woollen goods France in her wooden shoes so galls our kin that, unless Yorkshire and the West of England can improve in quality, and reduce in price, their ascendancy will most certainly be disputed. Reciprocity! The time is moving on when, if present conditions continue, India, America, France, Belgium, perhaps even Germany, will be quite able to dispense with differential duties, and compel many of us to change our cry from reciprocity to protection.

Most of these branches of industry are, however, threatened by only a single competitor, and he, as yet, looks to stand his ground scarcely within our borders, but only in his own or neutral markets. But agriculture! From "farthest Ind" to our nearest neighbour, from Australia, California, Russia, and the Cape—

The cry is still they come!

And not in single file, but in battalions!

The telegraph beckons, the steam-ship carries, the sea bears, the insular coast receives supplies from every point of the compass; railroads made by our own contractors, and completed with our own capital, reduce distance and cheapen cost. The hides of Buenos Ayres, the wool of "the fifth quarter of the globe," even the glue and bones of cattle and sheep, of nothing our farmers can produce are they left a monopoly. The Hindoo sayah, the "herathen Chinese," the Russian boer—we open our ports to them all; while our commercial economy and the course of shipping trade are so contrived as to reduce the cost of transport hither to a minimum. What country is there outside the latitude of the frigid zone that cannot produce the commodity in which our farmers deal—what

region fails to meet us in our own markets? And how do they meet us? The Hindoo, with a yard of calico round his loins for his clothing, a handful of rice for his diet, the fierce sun for fire and fuel, an integument of bark for shelter, sends us rice and wheat. A goat covers his wages. The "heathen Chinese" is already denounced by the native Americans for so underselling his labour that a living cannot be earned by his side. According to Villari, in Apulia the peasant works fourteen hours a day for 36 centimes—less than fourpence. M. Cardani states in fertile Lombardy the farmer's man never tastes meat or wine; and the women earn only 40l. per week. M. Porter, in his "Progress" of that nation, states that the farm labourer in Belgium earns 7d. per day, in Sweden 7d. or 8d., the family expenditure of the farmer himself being about £10 18s. 40l. *per annum*. In Denmark a man, his wife, and four children, all working every day, Sunday included, have among them about 1s. 9d. per day. In Mecklenburg the wages are 8s. 6d. per week, a dwelling with a garden, and pasture for a cow and two sheep; in Wurtemberg 5s. per week, in Bavaria 4s. In France a peasant, his wife and four children, earn among them 4s. 8d. per week; in Holland 5s. to 7s. 6d. Where farm servants are boarded they, in various parts of France, receive from £7 to £12 per annum; in Germany, from £2 10s. to £5; in Holland, from £8 to £12; in the Netherlands, from £4 10s. to £5 4s. The Fellah of Egypt thankfully takes about 4d. per day, while the Turk and the Muscovite can reckon on no more. Your space, perhaps your patience, does not admit of a more lengthened detail, and it is right I should add that although all the returns are those of our own Consuls at the respective States enumerated, the figures refer to the years *circa* 1834, requiring probably some, but no material qualification to adjust them to more recent quotations. But enough has been said to afford your readers a *vidimus* of the sort of competition with which the British farmer has to contend. I have said nothing of our poor-rates, our tithes and highway rates, our sanitary inspectors and sanitary doctors, our income-tax, our school boards, with their clerk, expensive triennial elections, inspector, and informer, and their abstraction of the boys from their work to attend school. But I have before me the statements of an Essex farmer with which the foregoing quotations may be confronted. "Our head ploughman has," he proceeds "15s. per week, one ton of coal per year, with house and garden, the under horseman 1s. less; and the other men 14s. Women 10d. to 1s. per day. Two men with a little assistance from their respective wives, earned in the harvest month of about 24 days, £24 each, being about 20s. per working day." The strike in Kent and Essex which has suggested the collection of those significant returns of the state of wages in the disturbed districts which have appeared in your columns, and the extracts from the books of farmers in the various parishes authenticate the fact that in Kent the farming men earn from £46 to £67 per annum, besides living rent free, and in some cases receiving fuel—or by the day from 17s. to 24s., and allowances at harvest. The outside public will be indeed surprised to learn that the grievance which drives the "bold peasantry," no longer "a country's pride," to the Maidstone skating rink, and in third-class special train to Exeter Hall, the time honoured asylum for "outraged humanity," is an income running from £60, £76, £84,



£98, and £100 up to a house, garden, fuel, £104, even to £120. In Cumberland the pay goes beyond even these figures, and I believe that of Lincolnshire is in no degree lower. In Scotland the absence until of late years of any legal provision for the poor, by repressing a redundant population has conspired with the intelligence, force of character, and capacity for work, and for migration of the peasantry to enable them always to exact high terms from their employers, and there is reason to believe that in the Northern and Midland counties the scale of remuneration is at least as high as prevails in Kent, Sussex, and Essex.

Now this question has to be answered by all concerned, and especially by Mr. Simmons and his unionists, including the pilgrims of Clerkenwell Green—a question as between man and man—Is it reasonable that our tenantry can be expected to sustain such a rate of wages with the prevailing averages of prices for their produce? Can husbandmen, against all the drawbacks of our climate and oppressive taxation, continue to pay from 15s. to 20s. weekly wages with wheat at 40s. per quarter, in competition with farmers who command the services of ploughmen at 8s. 6d. and of women at from 10d. to 1s. 8d. Just think of it. Our farmers have to give a quarter of wheat for every fortnight's labour. At the end of the year "Hodge" has received twenty-six quarters—the average produce of eight acres—to his own share, free of rent, rates, and taxes. Put it another way. There are masters and men alive now who half a century ago farmed and worked upon the acres they till at this day, when one week with another wheat averaged 80s. per quarter and wages 8s. per week—so that in place of a quarter for two weeks' labour as at present, the ploughman had to plod for eight or ten weeks for the same payment in kind.

The plain truth is, the peasant's wages are the result of the reflex action of the vast strides made by our manufacturing and mercantile industry. In the times of the handloom weavers, when there was little machinery, steam, and capital, to multiply the productive powers of the journeymen, the towns had small attraction for the ploughmen. Then predial labour stood on its own merits, and had to produce its own wages. In so far as the farmer and his profits are concerned, it must do so now. He is contented with a profit wholly disproportioned at the best to his skill, services, and risks. Five per cent. interest on capital, and five per cent. for personal superintendence, yield a return so inadequate that I can but express my surprise that any man of intelligence should throw away himself and his means on a calling so precarious. Yet there are many who cannot by farming realise the interest they could derive from mortgage or other secure investment, without either hazard or labour. Greece and Rome were civilised—their citizens free. Yet read their poets, historians, philosophers—is there to be found the least hint in their works of anything approaching to the scale of living among their labourers to which ours have arrived? Sparta-broth was the diet of man, who only allowed their helots to get drunk, as an example to disgust their children. Compare the diet of the Frenchman, Italian, Spaniard, the German, the Hindoo, the Chinaman, even the Swede or the Dane with that of "Hodge," and, to any impartial neutral, the relation of the services of the latter, to the cost of his subsistence, will seem to be simply preposterous. They do the very same work, produce the same material, labour and till so effectually as to chase us round our own Corn Exchange, and threaten to drive our peasantry out of the field. They overcome all the difficulties of transport, all the attendant cost, and risk, and outgrow and outwork us in our very market place. We scorn the diet of frog-eating Frenchmen, but on their frugal rations, they carried their flag

triumphant over Europe, and now are, in the arts of peace, equally pre-eminent. The Englishman is by far the most expensive human animal in the world. He is also the least provident. A rainy day is unknown in his moral and economical meteorology. Rye-bread may do for the Norseman, soup and lard for the Frenchman, olives, garlic, and a crust for the Spaniard, a melon and a bunch of grapes for the Italian, a handful of rice for the Hindoo; but "Hodge," who produces no more, who produces nothing else, who cannot hold his own in his own market, exacts tribute from the East Indies and the West, draws luxuries from all parts of the compass, and raises his exactions on his employer in the very ratio apparently of the decrease in his profits. Nay, passing from the comparison of nation with nation to that of class with class, how many clerks, nay, how many curates, receive more than the average incomes before quoted? Why even a cornet of dragoons or a lieutenant of infantry on full pay does not receive as much as the maximum reported from the Weald of Kent. I am appalled at the statements I daily continue to receive of the losses of farmers of large capital, well skilled, and favourably situated as to the size and fertility of their holdings. It is of no use for the "British Lion" to growl, that Englishmen are "accustomed to," and are "entitled to look" for, very different scales of subsistence from those of the "miserable serfs" of other countries. "Tall talk" cannot get the better of the multiplication table. Take the slate and cast it up. Facts may be vulgar, cruel, and sordid, but they are plaguy stubborn, and will have their way in the long run, let us vapour as we may. The gas of patriotic philanthropism must "pale its ineffectual fire" before the steady electric light of inexorable arithmetic. As for the empty threat of emigration, and the bribe of grants of land in Canada, why don't the tens of thousands who *have* migrated, and are starving in the streets of Canada and the States avail themselves of the offer? Why is every American employer reducing wages? Why has there been almost a civil war raised by the railway servants? What is the meaning of Horace Greeley's lament that his countrymen are everywhere giving up agriculture, ceasing to settle on the land, flocking to the towns? How is it that Australia and New Zealand protest against the further encouragement of emigration? Nay, why is it that the tide of migration has ebbed from North America and has flowed back from the New World to the Old? The richest man, said the Greek, is he who has the fewest wants. Our people must be taught, if not by reflection by necessity, *quantum ocelligal sit in parsimonia*. They must not look to be exempted from the common harder lot of general humanity. All the fine feelings in the world will fail to extract from the soil more than the produce and the price will yield. It is "palpable as a mountain" that our labourers have for many years been consuming more than they have produced, gradually drawing from the capitalist his accumulating profits. The President of the United States has felicitated Congress on the fact that the many millions of American Stock and Bonds held by British investors had been rapidly spirited back in payment of the breadstuffs we had imported. While from 1860 to 1873 the balance of trade was £221,000,000 against the Republic, in the last three years it has been £100,000,000 in its favour. "Instead," observes President Hayes "of paying to foreigners the ten millions sterling we used to pay, our present payments are reduced to £2,400,000." Messrs. Cross, Benson, and Co., add "these observations indicate that more than one hundred millions of Bonds have returned from Europe to the States. If £100,000,000 have been taken back in so short a time, there would necessarily be large shipments of gold to pay for our continued excess of export." In



every year from 1697 to 1823 our exports exceeded our imports to an average extent of £4,071,524, and in the whole by £13,012,007. In the three years ending 1833 our exports exceeded the imports by £101,000,000. But in 1876, the last of which I have record, the imports exceeded the exports of British produce by £174,515,499, and of this £139,021,744 went down our throats, reproducing nothing, but perishing in the use, and that in addition to an estimated consumption of spirits, beer, and tobacco of £163,000,000. As the wage-receiving classes exceed the aggregate of all the others by at least eight to one, it is very clear at whose door this prodigious waste must lie, and it is equally plain that this depletion is rapidly transferring the profits of capital, to the excessive wages of thriftless consumers. All Macculloch's quackery fails to explain this alarming fact away; and it is only too certain that if the profits of production continue not to be absorbed in reproductive industrial enterprise, but to be dissipated in excessive wages, which all go for mere eating and drinking, the end of our commercial supremacy, and the utter ruin of the labouring classes cannot be ultimately averted. Capital is of no country. It may be invested in securities. It may be applied to foreign enterprise, where labour is glad to work longer hours, and is contented with smaller wages. The Paris Exhibition may warn us of what foreign workers can do in every department of skilled or agricultural industry. Already I hear of British employers turning wistful eyes to the Continent as a refuge, which presses upon them almost as a necessity.

I have a daily receipt from farmers of letters and their balance-sheets. Many put to me the inquiry, "How about the land, the owners, and rent?" With your kind permission I would, in a concluding letter, say a word or two on a subject which is not adequately understood.

I am, Sir, &c.,

SIDNEY SMITH.

*The Minor, Feltham, Nov. 19th.*

## FARMERS AND THEIR FRIENDS.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—One of the principal obstacles to Land Law Reform and Tenant Right throughout the Empire, is the Conservatism of the English tenant farmers. I am not concerned in a defence of Whiggism in contradistinction to Conservatism. There is such a thing as political independence of both the one and the other, and if English tenants would but consult their true interests, they would unite their overwhelming political power in this independent direction. Instead, the great majority of them, judging by the representatives they return to Parliament, are Tory or Conservative. The reason for this, probably no Conservative English tenant farmer is able lucidly to explain. Doubtless the Conservatives are called the "farmers' friends" and that they are so a majority of English tenants as doubtlessly believe. That the belief is not a rational, or a reasonable, or an intelligent belief, the following historical facts will show. To go no further back; the statesmanship of the Conservative Ministry of the late Sir Robert Peel, and the one-sided Free Trade inaugurated by them in corn and cattle from foreign sources, the present difficulties of tenants are to be traced. Had the late Sir Robert Peel and his associates been statesmen enough to have then proposed and carried universal Free Trade and so emancipated the agriculture of the Empire from the trammellings of antiquated Land Laws, Game Laws, distraint, and everything else which handicaps the home producer in his race against his foreign rival, their Statesmanship would have been then and now entitled to respect. In that case, too, English farmers would have some justification at least, for that

traditional Conservatism they believe in, to the present hour. But in the one-sided Free Trade in foreign corn and foreign cattle, and in the refusal to coincidentally emancipate the home producer to enable him to compete successfully in his own markets with the producers of the world, in respect to these commodities, all which is due to Conservative statesmanship, there is nothing to justify English tenant Conservatism, but on the contrary, everything to make them detest the very name of Conservative.

Is this the only instance where the "farmers' friends" sacrificed the interests of the farmer? Certainly not. When the Conservative Ministry of the late Earl of Derby took its famous "leap in the dark" and proposed to give household suffrage to the boroughs and not to the counties, it not only did what was on the face of it unfair, but it gave a preponderating power to boroughs, which was proved in the last parliamentary Session in determined opposition to the prevention of the introduction of foreign cattle disease. Here then is a second instance of Conservative statesmanship, highly detrimental to farmers' interests, and clearly proving the rottenness of that Conservatism English tenants support.

Nor is this all to shew the folly of English tenant-farmer Conservatism. There is a further instance in proof of that folly in the fact that to the Tory party itself was mainly due the emasculation the Cattle Diseases Prevention Bill of last session underwent. Moreover, what have the present Conservative Government done for Malt Tax Repeal during the five sessions they have been in power with a large majority at their back? The party were ardent Malt Tax Repeaters while in opposition. Again, there is that precious piece of sham and humbug—the Agricultural Holdings Act. Very conservative it is no doubt to landlords, but how conservative in regard to tenants it is impossible to understand. What else have the Tories done or proposed to do for those tenants who love them dearly? Well, there is the County Government Bill of last session. To use an old adage, it was a thing of "one step forward and of two steps backward" in the way of progress for the Conservative farmers' advantage. Possibly much more of a similar value the Conservative English farmers hope for from their Conservative friends. And it is for the sake of all they have got and all they expect to get the English tenants keep up the Conservative cause and neglect the power inherent in themselves. Worse, it is for the sake of the Toryism they have had so much sham and deception from, they, the English farmers, send representatives to Parliament, not only to recompense them by deceptive sham and measures of veritable mischief and injustice, one-sided Free Trade, unequal franchises and the like, but to frustrate the every effort of Scotch and Irish tenants to obtain those reforms of hypothetic repeal, free trade in land, tenant right, and such changes as the requirements of modern husbandry imperatively demand. How long is this dog in the manger policy of English farmer Conservatism to continue? How long are the aspirations for reform of Scotch and Irish tenants to be baffled by the votes in Parliament of those Tories the English farmers will send these to oppose every thing but their own "protected" position and the selfish and mercenary interests they will maintain for their own benefit, although at the cost of the prosperity of the general community—that of Conservative tenant farmers included?

I am, Sir, &c.,

THOMAS ROBERTSON.

**TURKISH BATHS FOR HORSES.**—Mr. Wm. M. Singler, of Philadelphia, has provided in his private stables facilities for treating his favourite steeds to the luxury of a regular Turkish bath. It is said that the horses seem to enjoy the treatment, and receive benefit from it.—*New York Tribune.*

## COLONIAL AGRICULTURE.

Mr. W. H. Sotham writes to us from Abilene, Kansas, under the title of "A Trip to the West" :—

At Kansas City the stock yards are complete, though not nearly so extensive as those at Chicago. The immense slaughterhouse for packing beef affords a market for that kind of stock produce. The better class, sold in Kansas and Missouri, are shipped to the Eastern markets. The Missouri sale of Shorthorns at Kansas city, on October 22nd, was comparatively low, averaging a little over 85 dollars. The sale of the Messrs. Hamilton on the 23rd, was a little better, one of Mr. Abm. Renick's young bulls selling for 600 dol.; the average 105 dol. The second day another yearling bull, bred by Mr. Abm. Renick, sold for 1,060 dol. All containing the blood of this gentleman sold well. Messrs. Vanmeter and Hamilton having purchased 43 head of heifers and cows of Mr. R. last spring, will hereafter have more of that blood in their annual sales at this city. All who have seen his herd will admit that it is one of the best and most uniform herds of Shorthorns in the world, thus made by his and Mr. B. J. Vanmeter's combined good judgment in quality, symmetry, and compactness in the selection of bulls to produce good breeding, avoiding those long-legged, coarse-boned, paunchy, flabby, and unsymmetrical bulls of fashion called stylish. This was the secret of Mr. Renick's success, and thus his command in price.

There is one of the most extensive packing houses for beef at the Kansas City stock yards that can be found in this country; consequently there is a good demand for that class of cattle through the packing season, and there being an immense amount of feed in Kansas and Missouri, a great many are herded to meet that demand, the best ones being selected and fed for higher-class markets. There are more of the latter class of cattle held in Kansas to be fed for first-class beef than any other, and numerous herds abound there ripening for either of the three markets, Kansas City, St. Louis, or Chicago, or continue on to Buffalo, Albany, or New York, finally England, when the quality suits. The probability is that they change hands at each of the last three American markets before destined for England. I have travelled over a great portion of Kansas, and find it to be full of cattle of all classes; it is also full of corn, oats, and hay to feed them with, and the best graziers are looking to the English demand for their profit. I have visited Kansas annually for the past five years. The first year I saw nothing comparatively but Texas cattle, brought here in very low condition, to be wintered on hay and corn, and, being cheap, the graziers thought there must be a profit on them. I remember going out twenty miles from Omaha to see two hundred head of Texas steers that had been herded and corralled two years in Nebraska. They were brought into a large field for the purpose of sending them to market, and had been fed in the grazer's corral all the previous winter on corn in cribs, so that they could resort to it at pleasure. The cribs were never allowed to become empty; consequently the cattle did not crowd round the crib while the feeder was filling it. Thus fed they are never cloyed. The best graziers feed in this way in pastures through winter and summer, corn being about as cheap as grass. Although these cattle were four years old, it took two years to put the beef upon them, which was of fair marketable quality. When we went into the field to look at them they all ran off in a body like deer. I afterwards saw these steers sold at Chicago stock yards at 3½ cents. per pound, while the best beef was worth 5 cents. Kansas now contains a very different class of cattle. In all the herds I have seen grazing on the

prairies half and three-quarter breeds of Shorthorns are mingled. Numerous car-loads of Shorthorn and Hereford young bulls are constantly going to Texas, Colorado, Wyoming, and Montana, to improve the stock on the plains, and that improvement is plainly visible in the stock now coming from either of these cattle-producing regions. The Grade Herefords are just now beginning to come, and are highly approved by their producers and by those who purchase them. The demand for thoroughbred bulls cannot be supplied until more are bred. This supply will increase in quantity and quality as time passes. Swan Brothers, of Cheyenne, and the executors of the late Mr. J. W. Iliff, of South Platt, Colorado, alone have 56,000 head, having a range of 200 miles to feed them upon. Although these gentlemen are not partners, their herds mingle, and each knows his own by the brand. Other herds mix in, but the brand retains the claim when sent to market. Messrs. Swan Brothers, who have a herd of 6,000 cows, are now using Hereford bulls. Their cows are kept separately from the main herd. From what they have seen of other herds, in which Hereford bulls have been used, and from what their own experience tells them, they are convinced that the offspring of Hereford grades lay on flesh faster without care, are more active in search of their food, and carry their flesh to market better than grade Shorthorns. Hence Swann Brothers say they intend to breed up to the Herefords as near as they can, and in time hope to obtain a herd of white faces. Mr. Iliff had formed the same opinion, and was about contracting for a lot of Hereford bulls when death overtook him. His immense estate, containing many ranches, is now unsettled. These men, and others of similar experience in Shorthorns, have been looking to great size, regardless of symmetry, quality, and compactness. A Duke, no matter how long and coarse his legs, how deep his flabby brisket, how thin his hide or slack his crops, or how extended his paunch, was in great request. They now see their error, and are satisfied that, had they gone to a less fashionable Shorthorn, on shorter legs, with finer bone, thicker hide, symmetry and compactness, they would have produced more beef of better quality, and retained the constitution. Had this practical knowledge been obtained some years ago the Shorthorn mania would have had a check in time. Those men ruined by Dukes, Duchesses, and Thos. Bates would now be pursuing a course of good breeding beneficial to the country.

From the first time I visited the State of Kansas I have thought it was the best in the Union, and I still think so. At the present time it can support a hundredfold more cattle than it now does. Much of its natural produce is burnt annually in the standing prairie grass. There are more wheat, corn, and oats raised within forty miles of Abilene every year than in any other part of the United States, and men of capital are flocking in rapidly, with their studs, flocks, and herds, and with ample capital to sustain them. Last year Mr. George Hunton, from the State of Michigan, purchased a farm of upwards of a thousand acres, equal to any track of land I ever beheld. Aylesbury Flats, in my opinion, cannot equal it, and when brought into permanent old pasture it will carry fully as much stock per acre. The meadow grasses of England are congenial to the soil, and time will make the pasture as rich as any old pastures in England. Mr. Hunton has added a splendid mansion to this purchase, on the border of the city, overlooking the whole of his estate, and from which I am now writing. There are forty acres attached to this mansion, containing almost every kind of fruit.

Mr. Hutton intends to bring the whole farm to a proper state of culture, thus preparing it for mixed husbandry. He will keep a small stud of heavy horses, a herd of cross-bred Hereford and Shorthorns to breed beef for the English market, a flock of Merino sheep for scavengers, to eat up the weeds, and a herd of Berkshires for pork or bacon. All but the Merino he has now on hand, sufficient for an excellent foundation. The whole of this excellent land is underbedded with lime-stone, and that stone comes from the quarries in such shape as to be easily worked for building purposes. This same stone is also made into good lime. There is an inexhaustable bed of fine brick-clay on the border of the city; therefore the only lacking building material is lumber. The increased emigration of men of capital has been the means of adding many houses and three churches to the city during the past year. The beautiful and fertile country that surrounds this city will sustain the enterprise contained in it, and make it one of the most popular cities in the Union. Such men as Mr. Henry, Mr. Hutton, Mr. Lebold, Mr. Fisher, Mr. Warfield, and many others have been the pioneers to build up this enterprising city, which five years since contained but a very few houses; now the population consists of upwards of two thousand. These gentlemen are turning the neglected prairies into highly cultivated farms, and will ultimately reap ten-fold reward for their improvement. Mr. Hutton is building a very cosy cottage for his farmer, preparing his yards and sheds for his Shorthorns, which he does not intend to pamper. They will be here by the time all is finished. He will breed and feed for profit, and not for fancy. He is determined to banish the weeds, which he has successfully done on the 40 acres surrounding his house, which inexperienced men thought was impossible from the immense growth during a long period of careless culture. The wild sun-flowers were so tall and strong, with other weeds so thick as almost to hide the three-year old peach trees. I saw it then—I see it now; the contrast is a mark of superior culture, well worthy of praise. The fruit trees and those surrounding them for protection are thoroughly trimmed, the former walk on their way for an abundant bearing. So much for a beneficial change. Mr. Henry's orchard adjoining is two years older, well protected and well cultivated, and has borne abundantly. It is surprising to see the growth of the wild sun flowers after the wheat is off if left unploughed until late fall. But wheat after wheat is the rotation here, and the crops improve as culture improves, even without manure. But most of the farmers put more in than they can properly cultivate, and many undertake more than their capital will support. Such frequently get in debt and leave; hence spring up the weeds. When the land in the neighbourhood of Abilene is in the occupation of practical men of capital in smaller farms, subject to mixed husbandry, it must be the garden of the world. Such a deep, rich, soil, so much impregnated with lime, and with a climate so genial, is capable of bearing any kind of vegetable, or supporting any kind of animal. Wheat has been the prevailing crop, and the number of thousands of acres sown here has promoted Kansas to the highest average and the greatest quantity of any State in the Union. This is doing much for a State so young. If extensive farms are sought after they must be made suitable for mixed husbandry to be made profitable, and when they are established the same amount of wheat will be raised on half the number of acres with proper culture. Men of capital are constantly coming from all quarters. A son of Mr. Murphy has purchased near by, and has just received from the firm of Messrs. Avery and Murphy, of Detroit, Michigan, two car loads of Shorthorns and heavy horses. This farm

contains 1,200 acres. Mr. Charles Murphy, the occupant, is a young man of brain, muscle, and pluck, backed by perseverance and a proper taste for good culture. There are many more of this calibre on their way here. This city is situated on high ground, overlooking the country for miles, and is very healthy. It was formerly the shipping point for Texas cattle. Ellis, 150 miles west, met the new trail, making the drift shorter. Immense numbers of cattle are being shipped on Kansas Pacific Railroad. It is wonderful to see the number of cattle trains passing Abilene daily, giving Kansas graziers an opportunity of selecting stockers to advantage.

A trip to Brookville further west was quite gratifying. Extensive wheat and cornfields, abound. One would suppose that the extent of wheat grown on either side of the rail-road from Abilene to Brookville, an extent of sixty miles, would half support this country with bread. It extends for miles each way. The farmers make but little use of their wheat straw, most of which is burnt soon after it is thrashed, the head ploughed again for wheat; the strength in this soil, and its genial character for wheat has led occupiers to believe that wheat cannot exhaust it. Finer corn I never saw grow. When the Texas drovers could no longer continue their trail to Abilene, on account of the crops of wheat and corn they steered for Brookville. Wheat and corn fields were again their barrier. They then shortened their trail to Ellis, 100 miles further west. It costs much less to drive across the plains when grass is good than to go on the rail-road, as they carry their provision along in their waggon, and their horses and droves feed free. When at Brookville a drove of Cherokee cattle was driven into the stock-yards, and two large droves of Texas brought to be wintered in corrals on corn and prairie hay, put up at a dollar and a-quarter per ton. The drovers cautioned me not to go near the Texas cattle, as they ran from men on foot in a fright, and it was very difficult to stop them. Being familiar with men on horse-back, they had no fear of them, and riding was the only way to drive them. At the hotel the landlord keeps six brace of greyhounds, bred from a brace of imported ones. He keeps them to catch the "Jack rabbits" (so called here), they are precisely like the English hare, except in their long black ears, and they can run as fast. They are very plentiful all over the prairies, and afford much sport to the inhabitants of this town. Many of them sally out on horseback, and on foot to see the sport. A brace only would afford no excitement, so he took seven. To see them all after one "Jack rabbit" was a sight I never saw before. Some of them had learned to "run cunning," one on each side; the leader watched to catch on the first turn, but that was sometime coming, as the "Jack" is very fleet at the start, but gives up after the first half-mile, and is almost sure to be overtaken at the first turn by a dog on either side of the leader. The owner had trained them to this kind of sport. The "Jack" being plentiful on the prairies they soon killed four of them. In many places there are as many "Jack rabbits" as hares in English preserve, and the prairies are as level as the Downs there.

Two beves of quail, of about twenty each, almost divide their time between Mr. Hutton's and Mr. Henry's orchards, and are very tame. You cannot drive over the prairies without flushing lots of Prairie chicken (grouse) and quail, many of which have been killed for market, but the State law protects them now from "pot hunters." Wild ducks of various kinds are abundant; geese and berant are plentiful, and there are a few wild swans. Woodcocks, snipe, and plovers are also plentiful in the season. Deer and antelopes are frequently killed, but work on further West as the country becomes settled.

The Hon. T. Cavanaugh, near Selina, Kansas, has a

well-bred herd of Herefords, with which he has taken many prizes in this State, and they are liked very much where they are known. This is his first fall of showing.

The *St. Paul Press* says:—By dint of vigorous writing in agricultural journals, a concert of vigorous talking by breeders, and by some rather questionable practices at public sales, the fancy prices of Shorthorns were kept up considerably longer than many shrewd men expected that it could be done; but the days of 30,000-dollar cows and 15,000-dollar bulls are at last numbered in this country, for the present generation at least. And this is nothing against the breed as such. It is too late in the century to say aught against these cattle as beef-producers. Their record is a long and most honourable one. Shorthorns have simply got down to prices to which intrinsic merit entitles them. And now is the time for farmers to invest in them for the purpose of improving their herds of ordinary cattle. When good young bulls can be purchased at from 50 dollars to 150 dollars, no better investment can be made.

Our New Zealand correspondent writes:—The weather is truly delightful, and growth advances with astonishing rapidity—pastures, which a few weeks ago were able only to keep stock at the starvation point, being now absolutely clothed with verdure, and affording a full bite for the heaviest animals. After an unusually lengthened and severe winter the weather set in very suddenly, benefiting both the pastoral and agricultural farmer in the north to an incalculable extent, as it at once provided food for stock, and enabled field operations to be proceeded with, that had fallen very much in arrears during the excessively wet period throughout the months of June, July, August, and early part of September. In the South Island, however, the effect of the sudden setting-in of warm weather has been very different—the snow on the lofty mountain ranges of Canterbury and Otago, having melted quicker than the rivers could carry off the water, and the consequence has been that the country has been devastated by a series of most disastrous floods. Live stock have been swept away in great numbers, bridges, farm-houses, and even streets destroyed, and many farms have been so covered with debris as to be rendered completely sterile and waste. Large numbers of families have lost all their possessions, and so urgent is the distress which has resulted, that subscriptions have had to be instituted in which every province of the colony has been requested to join. In the neighbourhood of Dunedin railway communication has been repeatedly stopped by the submerging of the line for great distances, and in some instances the inhabitants of entire towns have had to leave their homes. The fine weather here has enabled sheep-shearing to go on without interruption, and all store sheep are now shorn, but ewe flocks are just being washed, the severity of the spring having rendered them so low in condition as to make it too great a risk to clip early. The sudden setting in of fine weather and consequent rust of grass, has at once brought down the price of meat, and thirty-two per cent of one hundred pounds is about the top price to the producer, while mutton scarcely reaches an average 3½d. a lb. for best qualities, the latter rapidly approaching the desirable state of ripeness, but beef is light on the rib, and will take a month yet before it reaches the necessary excellence. Butter has come down in the short space of a fortnight from 1s. 9d. a lb. to 1s., and will be lower by a fourth very shortly, this low value affecting the small farmers most severely, as it is by the production of this article large numbers of them make the greater part of their living, but there are so many at it in proportion to the population, that it is utterly impossible it can command a paying rate during the height of the season. Spring corn

has been got in in much better order than was at one time anticipated, the finish having been favourable, and most fields are now green. Wheat was greatly benefited by the application of the Cambridge roller, to break the winter crust, Crookill's heavy clod-crusher being ever used for this purpose with manifest advantage, and most fields look well, although blights on low-lying land still testify to the severe and wet character of the winter. A great breadth of potatoes has been planted all over the country, this being one of the best paying crops grown, as it mostly does well, disease being unknown, and labour of producing it being simply confined to the cultural operations, farm yard dung being never given, and artificial manures but seldom, although their use is gaining ground, but the newness of the soil and the still almost unimpaired condition of its permanent resources will enable it to raise paying crops without much assistance for many years to come.

**THE FRESH AIR.**—"It's indoors, sir, as kills half the people; bring indoors three parts of the day, and next to that taking too much drink and vittals. Eating's as bad as drink ing; and there ain't nothing like fresh air and the smell of the woods. You should come out here in the spring, when the oak timber is throwed (because, you see, the sap be rising, and the bark strips then), and just sit down on a stick fresh peeled—I means a trunk you know—and sniff up the scent of that there oak bark. It goes right down your throat, and preserves your lungs, as the tan do leather. And I've heard say a folk who work in tan-yards never have no illness. There's always a smell from trees dead or living—I could tell you what wood a log was in the dark by my nose, and the air is better where the woods be. The ladies up in the great houses sometimes goes out into the fir plantations—the turpentine scents strong, you see—and they say its good for the chest; but, bless you, you must live in it. People go abroad, I'm told, to live at the pine forests to cure 'em; I say these here oaks have got every bit as much good in that way. I never eat but two meals a day—breakfast and supper: what you would call dinner—and maybe in the middle of the day a haunch of dry bread and an apple. I take a deal for breakfast, and I am rather lean (hungry) at supper; but you may lag your oaks that's why I'm what I am in the way of health. People stuff themselves, and by consequence it breaks out, you see. Its the same with cattle; they're overfed, tied up in stalls and stuffed, and never no exercise, and mostly oily food too. It stands to reason they must get bad; and that's the real cause of these there rinderpests and pleuro-pneumonia and what-nots. At least that's my notion. I'm in the woods all day, and never comes home till supper—cept, of course, in breeding time, to fetch the meal and stuff for the birds—so I gets the fresh air, you see; and the fresh air is the life, sir. There's the smell of the earth too—especially as the plough turns it up—which is a fine thing; and the hedges and the grass are as sweet as sugar after a shower. Anything with a green leaf is the thing, depend upon it, if you want to live healthy."—Gamekeeper at Home, in *Dull Mall Gazette*.

**A SNAKE IN THE GRASS.**—In the colouring of artificial flowers aniline dyes are now largely used, as, for instance, in dyeing dried and artificial grasses. These bronze-green and similar colours, now so much worn by ladies, are not "fixed," and when worn in bonnets, caps, wreaths, &c. the dye is apt to become transferred to the skin of the head producing local symptoms, which not only cause much annoyance by dyeing the skin, but may also produce unpleasant irritation, and even, under severe circumstances, inflammation. Of the reprehensibility of employing arsenical pigments in artificial flower making there cannot be two opinions, if we go no further than the liability to chronic poisoning, or at any rate to seriously debilitated health, of the crowds of women and girls who are busy through every long working-day in preparing the pretty floral ornaments which deck the head-gear of our wives and sisters. Legislation is much wanted on the subject, and in this age of progress in sanitation we hope to see in our own generation the passing of an Act which shall abolish the use of arsenic not only in wall papers, but in articles of wearing apparel.—*Sanitary Record*.

## SHORTHORNS AND HEREFORDS.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—“Vigil” says in the *Express* of Oct. 21: “One of our best and most famous Shorthorn breeders told me this—he never saw a Shorthorn so good as the first-prize Hereford heifer at the Oxford Show. Pity the Hereford gentlemen cannot be equally impartial.” The above testimony of one of England’s most famous Shorthorn breeders in support of the award rendered at Oxford in favour of the Hereford heifer is well, and will go some way to convince Shorthorn men on this side that the award was an honest one. But to talk about the impartiality of Hereford writers on both sides of the Atlantic as compared with Shorthorn advocates—As to the English standpoint I can only speak from observation. I find in your columns last year a wholesome condemnation of the Shorthorn influence in the judging at Smithfield. I find by the records of that Society that the Herefords at any given age score as good weight as do the Shorthorns. I turn to the Market reports and find the Hereford is quoted at a higher market price always than the Shorthorn. If then the Hereford will make equal weight with the Shorthorn at any given age and always commands a price that tops the Shorthorn, will Vigil show where the impartiality is? The Hereford breeder in England has been for a quarter of a century taking his cattle to Smithfield, showing equal weights with the Shorthorn, and from the show-yard to the butcher at a penny a pound better figures, and still the Shorthorn has the champion awards. Is it surprising that the Hereford breeder is somewhat out of temper? We should be glad to see the Hereford and Shorthorn question discussed on your side, on these points—to wit, if the Hereford and Shorthorn make equal weights at any given age, and the Hereford will command a higher price, how is it that the Shorthorn can command the champion awards? As to the comparative impartiality of the Hereford and Shorthorn advocates on this side, your old correspondent, Mr. W. H. Sotham, forty years since, brought Herefords to this country, securing the aid of one of the best men in this country to aid him, but the Shorthorn breeders, by their “impartiality,” beat him. And they have been able, by the control of our agricultural societies, to keep the Herefords down and build up the Shorthorns until now. On this side the Herefords are fast assuming the position their merits entitle them to hold. And in advocating their merits we make the fight an aggressive one. We claim that the Herefords are the better beef animals in all conditions and all circumstances. We offer to make the test on any basis the Shorthorns may desire, only stipulating that it shall be on a scale sufficiently large as to make the test of value; and there are none of them that dare make the test.

If I am not mistaken, the general verdict will soon be issued that the Shorthorns as a breed are not equal to the Herefords. Again, “Vigil,” in the same article, says:—“There is room for both. If the Hereford kine could have their faces coloured, so that they could be used for crossing purposes, they would make a leap at once in increased popularity.” This is an admission of merit that Shorthorn men, with all their “impartiality,” seldom make. But it is a difficult thing to colour their faces. The Shorthorns can’t do it, and the Shorthorn men might accept of the colour to obtain the quality. I have noticed that some of the advocates of the Shorthorns are taking considerable credit to themselves, because the Galloways, with even a Shorthorn cross, can still maintain their market value in London, and going still further and claiming merit for the Shorthorns on this account. In

all the discussions as to the merits of the two breeds the most important one is not made prominent as it should be—to wit, the cost of production. And Mr. Rogers, think it was, that made a statement at a public sale in England, that five Herefords could be kept where for Shorthorns could. This was alluded to by you and other English journals at the time. I have not noticed that anyone has questioned the statement on our side.

One of the leading Shorthorn journals on this side admitted it to be true as to three-year-olds and over, but denied it as to ages under three-years-old. Those who have bred both breeds in this country claim for the younger ages as well as the older. A gentleman who bred Herefords 40 years since in Vermont, says that the cows were the best he ever owned, and that the young things were always fit for the butcher. Personally I would not discuss this question on any other basis than the simple one of merit. We labour under many difficulties on this side in reaching facts that you do not. Your country full of men who have been breeders and feeders for a half century or more—men who know just how far feeders go—just which kind shall be used, and when. Our breeders are Englishmen. It is possible that I reach the authorities that show the merit of the Herefords more fully than the Shorthorns. I am trying to get at this question fairly. Beef on your side for a few years past has brought prices that would pay the feeder; to-day, however, the price is so low that feeders must work close to get profit, and they must get the best feeders to reach a gain. And the shipping of beef from this side to yours must make this question a close one for your feeders.

The positions then that I assume are these:—That the question of merit is between the Shorthorn and Hereford. That as between these they make at any given age equal weights. That the Hereford always commands the higher price in the English markets. If then the cost of production is equal, the Hereford is so much the better animal as he is worth more to the butcher. Again comes the question as to the two breeds as graziers or feeders, or in other words, the cost of production. What will the English breeder say on this point?

I am, Sir, &amp;c.,

Beecher, Illinois, U.S.

T. L. MILLER.

## OAKHAM FAT STOCK SHOW.

The 48th Christmas Show of the Rutland Agricultural Society was held on Wednesday and Thursday, and notwithstanding the depression which seems to pervade almost every class of industry, agriculture not excepted, it was on the whole a very fair average exhibition. There was not quite so large a show of cattle as at some previous shows, and the general quality of the animals was considered to be somewhat below the mark. In class 1 there were only four entries, but the animal that took the honours was a magnificent-looking roan ox, weighing 26 cwt. Last year it took a second prize at Oakham, second at Norwich, a first at Birmingham, St. Leon Boston, Louth, and Grimsby. This year a second at Peterboro’, a first at Lincoln and Northampton, and the Prince of Wales’s cup at Norwich. It was greatly admired, and was pronounced by some critics to be a very deserving animal, but slightly declining in its under meat. J. J. Colman, Esq.’s, 3 years and 10 months old steer was a fair specimen, but it looked comparatively small beside Mr. Bond’s Mammoth. In Class 2 there were only two exhibits, and there was not a very marked difference between them, both being a good class of heavy butchers’ meat. In Class 3 there was only one animal, a black Scot, but it was well worthy of the prize awarded to it, being a very fine animal. It had taken prizes at other shows. In Class 4 there were three very compact Shorthorn steers

the first prize being taken by Earl Spencer with a magnificent animal that took a first prize last year at this show and another at Northampton. The third animal in this class got the Earl of Loudale's prize of £15, it being the only animal exhibited that had been bred and fed within the district of the Cottesmore Hunt. In the next class Col. Reeve was first with his roan cow *Priscilla* 94th, and Mr. Mackinder, of Sempringham, second. Mr. E. Hubbard's *May Queen*, which took first prize in Class 16, was a very bulky good animal, and has taken no less than 13 prizes. The first prize in Class 8 was taken by Sir W. De Capell Brooke with a fleshy roan steer, and Mr. Swingle was second with a compact little animal that looked like training for another year. The cow classes were pretty well filled, but weak as regards the quality of the exhibits. Mr. T. H. Bland's *Brazilian Bride*, which took first honours in class 10, has been a great prize-taker, but has gone off. The two heifer classes were considered the best in the show, and Mr. Hubbard's *Queen of the Roses*, which took the first prize, was considered to be the best animal in the best department. It was a splendid uniform heifer, and was greatly admired. The bulls, although strong as to numbers, were considered a very ordinary lot. The cottagers' class was well filled with a lot of useful animals. The show of sheep was extraordinarily good. There were, however, only two pens of Leicesters, and this was stated to be owing to the fact that this breed of sheep is very much on the decline. The few shown were of remarkable size and had very heavy fleeces. The Lincolns were a "rest-paying" lot of animals, being full of flesh and with good fleeces. The Prince of Wales cup fell to a pen of very fine fat wethers belonging to Mr. Barge that took first prize in class 21. Breeding ewes were very strong as to numbers, and Mr. C. J. Bradshaw, an old prize-taker took first prize with a very superior pen. Mr. J. H. L. Wingfield's pen of long-wool theives were a magnificent lot being full of meat and carrying very heavy coats of wool. Mr. Wingfield also took a first prize for lambs, which were considered also very good animals, the Marquis of Exeter being second with a pen but little inferior. Mr. T. Close was also a successful competitor in this department. For cross-bred wether lambs the Marquis of Exeter was the only exhibitor, and he was awarded the first prize, the pen being a very good one. Of odd sheep there were only four, but all the animals were splendid specimens of their kind, and the prize was awarded to a grand animal belonging to Mr. T. Close, which has by itself and along with others, taken 10 prizes. Pigs were not very numerous, but what were exhibited were of first-rate quality. The show of poultry was magnificent, far surpassing any previous exhibition, both as regards the number and quality of the birds, all of which were in excellent plumage. The Aylesbury and Rouen ducks were extraordinarily fine, as also were the geese and turkeys and the Dorking fowls. The Earl of Gainsborough's £10 challenge cup was taken by Dr. Snell, a renowned prize-taker, with a very fine pen of pure Dorkings; Mrs. Finch's egg stand by Messrs. Morris, of Oakham, with a pen of most excellent cross-bred chickens; the Misses Finch's silver cup by Mr. B. Smith, Cropwell Butler, with a handsome coloured Dorking cock; the Marchioness of Hantley's silver cup by Mr. E. Kendrick, with a dark Brahma cock, which he priced at £100; Lady F. Cecil's cup by Messrs. Duckworth, with a pretty gold and spangled Hamburg cock and hen; another silver cup given by the same lady by Messrs. King, of Hebden, with a graceful-looking little bantam cock and hen; and Lady Augusta Noel's silver cup by Mr. E. Walker, of Leicester, with a carrier hen, which he priced at £200. A finer collection of pigeons has rarely been seen before, the runs being of remarkable size. The

show of cart horses was exceedingly good, and the brood mares were a very fine class. Mr. T. M. Wright's brown horse that took the first prize in Class 36 was pronounced by all to be an extraordinarily good animal, and it was readily sold for £300. Ponies were not considered a particularly good lot, but there was one or two nice looking animals amongst them. The Hon. Hugh Lowther's *Little Nell* that took the first prize was an extraordinarily fast goer. The weather on Wednesday was very gloomy and wet, and the attendance at the show was consequently exceedingly small. Amongst those who were present we noticed the Marquis and Marchioness of Exeter, the Earl of Gainsborough, Lady Augusta Noel, and the Misses Noel, Lady E. Gordon, J. L. Wingfield, Esq., and Mrs. Wingfield, Sir Henry Stuyder, Mr. Finch, Mr. Lowther, and several other ladies and gentlemen of the county. On the second day the weather was fine, and the company a large one.

## PRIZE LIST.

JUDGES.—BEASTS: Mr. J. Lynn, Stratton; Mr. J. Pears, Hackthorn; Mr. J. Parker, Inceby.—SHEEP AND PIGS: Mr. C. Clarke, Ashby; Mr. A. Hack, Bucknaster; Mr. R. Griffin, Borough Fen.—CART HORSES: Mr. H. Hodgkin, Sandringham; Mr. H. Cross, Carly; Mr. R. Griffin, Borough Fen.—HUNTERS: Mr. R. Heathcote; Mr. J. Hornaby, Grantham; Mr. Day Clarke, Ashby.

## CATTLE.

## FAT CATTLE.

Shorthorn oxen or steers exceeding three years and three months old (open).—First prize, £15, T. Bond, North Thoresby; second, £7, J. J. Colman, Carrow House, Norwich.

Oxen or steers of any breed, or cross or mixed breed, not being pure-bred Shorthorns, exceeding three years and three months old (open).—First prize, £15, W. A. Fraser, Brackla, Nairn, N.B.; second, £7, J. S. Hick, Braunston.

Scotch Highland or pulled oxen or steers of any age (open).—piece of plate, value 10 gu.—Prize, J. J. Colman.

Fat steers of any breed not exceeding three years and three months old (open).—First prize, £10, Earl Spencer, Althorpe Park; second, £5, W. H. Potterton, Boughton Grange.

Cows of any breed or age (open).—First prize, £10, Colonel Reeve, Leadenham; second, £5, D. Mackinder, Sempringham House, Falkingham.

Heifers of any breed not exceeding four years old (open).—first prize, £10, E. Hubbard, Lound, Lowestoft; second, £5, T. Bond.

Steers not exceeding two years and six months old.—Prize, £10, C. J. Bradshaw, Barley-on-the-Hill.

Steers not exceeding one year and nine months old.—First prize, £7, Sir W. de Capell Brooke, Geddington Grange; second, £3, T. Swingle, Langham.

Fat beasts of any breed, shown as extra stock, above two years and six months old.—Prize, £5, G. Chapman, Brook Farm, Exton.

Best beast shown in the above classes, a silver medal and special prizetot £30.—Prize, T. Bond's Shorthorn ox in class 1.

Best beast shown in the above classes bred and fed within the district of the Cottesmore Hunt.—Prize, £20, Earl of Gainsborough's Shorthorn steer in class 4.

## BREEDING CLASSES.

Cows above three years old, in milk or in calf.—First prize, £10, T. H. Bland, Market Harborough; second, £5, G. Chapman.

Heifers above two and not exceeding three years old, in calf or in milk, bred within the district.—First prize, £7, C. Hubbard, Langham; second, £5, C. W. Griffin, Warrington.

Heifers above one and not exceeding two years old, bred within the district.—First prize, £7, C. W. Griffin; second, £4, Marquis of Exeter, Burghley House.

Heifer calves above six and not exceeding twelve months old.—First prize, £8, G. L. Watson, Rockingham Castle; second, £2, J. Woods, Langham.

Bulls not exceeding 15 months old.—First prize, £10, J. H. Caswell, Loughton, Falkingham; second, £5, Marquis of Exeter.

Cows in milk.—First prize, £5, Mary Bailey, Stonesby; second, £2, G. Smith, Ashwell.

Heifers under three years old.—First prize, £4, Mary Bailey; second, £2, W. Almond, Lingham.

Heifer calves above six and not exceeding twelve months old.—First prize, £2, W. Almond; second, £1, J. Williamson, Lingham.

Breeding beasts over two years old, in calf or in milk, shown as extra stock, a gold medal or 10 gs., G. Chapman; and a silver medal value 5 gs., Marquis of Exeter.

Best beast shown in classes 10, 11, 12, 14, 15, 16, 17, or 18.—Prize, £10, C. Hubbard's heifer in class 11.

Best beast in the Show.—Prize, silver cup, value 10 gs., T. Boud's ox in class 1.

### SHEEP.

#### FAT SHEEP.

Three fat Leicester wethers, one year old (open).—First prize, silver cup or £10, B. Painter, Barley-on-the-Hill; second, £5, T. Swingle, Lingham.

Three Lincoln long-woolled fat wethers, one year old (open).—First prize, £10, C. Sell, Basingbourne; second, £5, J. H. L. Wingfield, Ticknecote.

Best pen in classes 19 and 20.—Prize, £5, C. Sell.

Three short-woolled fat wethers (open).—First prize, £10, C. Barge, Weedon; second, £5, Duke of Buckingham, Buckingham.

Three cross-bred fat wethers, one year old (open).—First prize, £10, W. Wells, Peterboro'; second, £5, C. Sell.

For the best pen in classes 21 and 22.—A silver cup, value 10 gs., C. Barge.

#### BREEDING AND STORE SHEEP.

Four long-woolled breeding ewes, bred within the district.—First prize, £5, C. J. Bradshaw; second, £3, Mrs. Anne Orson, Sysooby, Melton.

Four long-woolled ewes, bred and fed within the district.—First prize, £5, J. H. L. Wingfield; second, £3, T. Close, jun., Barnack.

Four long-woolled wether lambs (ram lambs accepted), bred and fed within the district.—First prize, £5, J. H. L. Wingfield; second, £3, Marquis of Exeter.

Four long-woolled ewe lambs, bred and fed within the district.—First prize, £5, T. Close, jun.; second, £3, J. H. L. Wingfield.

For the best pen in classes 23, 24, 25, or 26.—Prize, £5, J. H. L. Wingfield, in class 24.

Four cross-bred wether lambs, bred and fed within the district.—Prize, a silver cup value 5 gs., Marquis of Exeter.

Long-woolled sheep of any age, shown as extra stock (open).—A silver cup, value 5 gs., T. Close, jun.

Short-woolled sheep, shown as extra stock (open).—Prize, £5, W. Wells, Holmes.

### PIGS.

Fat pigs under 18 months old (open).—First prize, £5, J. Harris, Lingham; second, £5, W. Carver and Sons, Ingarsby, Leicester.

Fat pigs under 10 months old, not exceeding 30 stone live weight (open).—First prize, £5, Carver and Sons; second, £3, S. Thorpe, Groetham.

Tenant occupiers in the district for fat pigs of any weight.—First prize, £2, W. Martin, Exton; second, £1, A. Alexander, Pickworth.

### HORSES.

Cart mares four years old and upwards.—First prize, £10, G. H. Finch, Oakham; second, J. Bromhead, Barley-on-the-Hill.

Cart fillies under four years old, bred within the district.—First prize, B. E. Bennett, Market Harborough; second, £5, T. Stokes, Caldecott.

Cart horses above four and under seven years old.—First prize, T. Plowright, jun., Pinchbeck; second, £5, J. D. Westerdale, Melton Mowbray.

Cart colts under four years old, bred within the district.—First prize, £10, T. Plowright, jun.; second, £5, B. Ward, Harringworth.

Cart stallions travelling within a radius of 15 miles of Oakham.—First prize, £30, R. Ward; second, £10, Neale, Baston Fen.

Mares adapted for breeding hunters, in foal or having a foal by a thoroughbred horse (open to tenant farmers or tradesmen in the district).—First prize, £10, A. Hack, Buckminster, Grantham; second, £5, H. Custance, Manton.

Ponies not exceeding 13½ hands.—First prize, £5, Hon. H. Lothian, Oakham; second, a hunting whip, W. Close, Collyweston.

Hunting mares or geldings above four years old, in riding order (open).—First prize, £20, R. Phipps, Northampton; second, £10, Lord Erne Grouse.

Four-year-old hunting mares or geldings, in riding order, bred within the district (open to farmers or tradesmen).—First prize, £30, A. R. Ascock, Keton, Northampton; second, £15, G. S. Smith, Stowe Stamford; third, £5, J. Smeeton, Rugby.

For the best hunter in classes 40 and 41.—Prize, silver cup, value 10 gs., G. S. Smith, in class 41.

For the best hunting mare or gelding in classes 40 and 41, able to carry 15 stone to hounds.—Prize, £10, G. S. Smith.

Three-year-old hunting mares or geldings, bred within the district (open to farmers or tradesmen).—First prize, £10, J. Staple, Peterborough; second, £5, J. Langley, Uppingham.

Riding mares or geldings under seven years old, not exceeding 15 hands 1 in. (open to farmers or tradesmen).—First prize, £10, J. H. Stokes, Market Harborough; second, £5, H. H. Whincup, Wittering.

Horses for jumping.—First prize, £10, R. Bland Banton; second, £7, J. Cant, Great Easton; third, £3, E. Worrall, Ashby Folville. In this class Mr. Bland's horse was matched against Dr. Waller's, of Peterborough, for £500 to jump the water jump.—*Stamford Mercury*.

NEW ZEALAND STATISTICS.—From advance sheet of part of the "Statistics of New Zealand, 1877," we can find the following data:—The total estimated population of the colony on December 31st, 1877, was 417,622, exclusive of 35,470 Maoris. This shows an increase over the population of 1876 of 18,547, of which 12,177 is due to excess of births over deaths, and 6,370 to immigration. A regular census was taken in March last, but the results are not yet published. The population has nearly doubled during the last ten years. Of the 4,685 deaths, one-third were of children under one year, and nearly one-half under five years. The total number of vessels that entered inwards during the year 1877 at the various ports of the colony was 812, of 318,568 tons. This number shows a falling off from 1876, when 878 vessels entered. The number of vessels that entered coastwise was 17,260, of 1,754,158 tons, as compared with 18,553, of 1,908,317 tons in 1876. The number cleared was 17,339, of 1,738,224 tons, as compared with 18,318, of 1,876,843 tons in 1876. Of the British vessels entered inwards 112 were from the United Kingdom, 835 from New South Wales, 105 from Victoria, and 70 from Tasmania; 43 vessels, of 57,450 tons, were American. Of the shipping outwards, 70 vessels, of 64,427 tons, were for the United Kingdom; 381, of 183,132 tons, for New South Wales; 136, of 44,772 tons, for Victoria; 13, of 9,294 tons for the United States. Five hundred and thirty three sailing and steam vessels were in the register of the colony of December 31st, 1877, as compared with 538 in 1876. The total value of the imports of the colony in 1877 was £8,973,418, and the total duty received £1,213,478. Of this sum, agricultural implements are valued at £20,626; apparel and cloths, £176,705; arms and ammunition, £33,300; bags and sacks, £71,500; bark, £16,962; beer, £78,000; bones and bone dust, £11,531; books, £18,707; boots and shoes, £181,300; brushware and brooms, £15,254; candles, £94,412; canvas, £14,932; carpeting, &c., £31,000; cement and plaster of Paris, £50,000; coals, £240,638, of which £230,082 came from New South Wales; cottons, £83,000; drapery, £258,345; fancy goods, £79,000; drapery, £258,345; fancy goods, £79,000; flour, £27,488; fruits, preserved and green, £95,000; furniture, £62,000; glass and glassware, £63,000; grain, £90,000, of which £26,000 worth of rice came from Victoria and £28,000 worth of wheat came from South Australia; guano, £2,195; haberdashery, £79,000; hardware and ironmongery, £231,000; instruments (musical, scientific, &c.), £80,000; iron, of various kinds, £230,000; jewelry, £16,000; leather, £57,000; horned cattle, £5,850; horses, £6,975; sheep, £12,231; machinery, £142,000; oils, £180,000; printing paper, £46,000; railway plant, £61,583; seeds, £73,000; silks, £31,987; specie, £18,150; spirits, £238,000; sugar, £29,000; tea, £213,000; timber, £78,000; tobacco, £118,000; wine, £95,400; woollens, £107,000.—*Times*.

## FREE TRADE IN LAND.

No. XIV.

(From the *Manchester Examiner*.)

"We have a melancholy satisfaction in being able to add the following to the important letters on the Land Question, by the late Mr. Joseph K., which have been published in our columns at intervals for some time past. The lines we now publish were the last that fell from his pen. He was engaged in writing this letter when the shock of illness seized him, which ended in his sudden decease."

I have now endeavoured to present to my readers as fair and dispassionate an account as I was able to give of the effects of the French system of land laws in those European countries in which they have been in force for such a length of time as to enable a fair judge to form a reliable opinion on such a subject. I have shown how those laws are working in France, Belgium, the Channel Islands, Switzerland, the Rhine provinces of Germany, Holland and Norway; and I have cited the opinions of many able, experienced, and most distinguished men of different countries in support of the statements I have made.

The same system of land laws has been put in force in Southern Italy since she shook herself free of foreign clerical masters. It is too soon to inquire into the effect of these laws in Italy at present, but it requires no great gift of prophecy to predict that the vast, ill-managed, and badly-cultivated estates of the great nobles of the Roman, Neapolitan, and Sicilian provinces will soon follow the fate of the once similar estates of the French nobles, and be sold and divided among yeomen and peasant farmers, who will reclaim the wastes and marshes, and bring health, plenty, and comfort, where disease, misery, and sterility now prevail.

Even since I wrote the account of the condition of the yeomen and peasant farmers of France and showed how far removed they were, spite of all the disastres of the late war, from being "pauper warren" which had been prophesied, remarkable statements have appeared in two of our leading journals, one of which, the *Times*, has at all times been a vehement opponent of "free trade in land," or of any system approaching in character to that of France.

The *Times* of the 18th of September, 1878, in a leading article upon the immense and costly works projected and already commenced with wonderful success by M. de Freycinet the enterprising Minister of Public Works, and warmly supported by M. Say, the cautious financier who now controls the French Exchequer, and by the ardent and cautious M. Dufaure, who is the head of the French Ministry, says: "On one subject be (M. Say) spoke with a confidence on which France may be congratulated. The increase of national wealth continues as great as ever. The accumulations of France astonished Europe in 1873. M. Say reckoned the savings of the country available for investment since the beginning of the year at 281,000,000 £., and referred with natural pride to the ease with which during the last two months he had raised a loan of over four-and-a-half millions sterling at three per cent. The success of this great operation was the more remarkable as the ordinary machinery for reaching investors was dispensed with. With such resources to look to, he had no apprehensions that the country will be unable to meet the obligations which the development of public works will entail."

It should be remembered that to defray the expenses of the gigantic works of which M. Say and the *Times* speak, about 500,000,000 £. a year will be required for the next ten years.

And the *Spectator* of the 14th day of September, 1878, writing on the same subject, says: "So great are the savings of the people that more than £10,000,000 sterling has been deposited in the savings banks in the past seven months."

The Government can obtain money more cheaply than at any time in the past 35 years.

Whatever the other consequences of the law of equal partition in France, it certainly has developed the passion of industry to an unprecedented degree. The French peasant, owning his land, works and saves as no man works and saves—certainly not the Englishman, who, though industrious, has not acquired from the possession of property the instinct of thrift."

But I shall be asked, if the French system of land laws make the yeomen and peasant farmers, who cultivate their own land, so prosperous and happy in all these countries into which this

system of laws has been introduced; what objection can, I reasonably raised against it? This is a reasonable question, which I will try to answer.

1. It must be remembered, from what I have said in No. IX, that if a father has a large family this law leaves him the power of leaving by will to any one whom he chooses only a very small portion of his land. For example, if he had six children at the time of his death, he could only devise as he chose one-seventh of his estate; if he had eight children, one-ninth; and so on. All the rest of the land is divided by the law among the children equally, if they choose to claim their shares. Of course, in a vast number of cases they do not so choose. Before the father's death they have generally chosen their mode of life. Some go to the towns, some to the army, some to artisan's work, some to service, and so on. All these know nothing about farming whatever. Moreover they know that there would not be land enough for all if they chose to divide the estate, and, also, that farm buildings would have to be built, and that farm stock would have to be purchased for each portion; so that, as any reasonable man will perceive, although the law gives each child a share of the land if he chooses to take it, it continually happens that the circumstances I have just mentioned make them unwilling to divide the farm. And in this case, either the farm is sold in one lot in the market, and the proceeds divided among the children, or one of the children takes the farm, and gradually pays off the shares of his brothers and sisters. All this is forgotten or misunderstood by English writers on the subject, who are constantly treating the subject as if the farm must necessarily be divided, because the law says each child shall be entitled to a certain share. The great estates go on gradually dividing, partly because they consist of many separate farms, each of which can be sold separately, and partly because many of the smaller proprietors are always looking out for a chance of buying small plots of land wherewith to enlarge their small estates.

But although this is so, still, no doubt, there are many cases in which, spite of all these considerations, the land is actually divided when the whole extent of it is so small as to make division highly inexpedient. And this, no doubt, is a bad effect of this system of laws. How far this evil, where it does exist, is counterbalanced by the vast benefits conferred by this law upon the rural classes, time and experience alone can sufficiently explain.

2. Another evil which results from this system is that it often diminishes the authority and influence which a father ought to exercise over his family. In a family in which there are five or six children, all know that the law gives them an equal share of the property on the death of the father, and in such a case the father would be able to leave as he chose only a seventh of his land. The children know that, no matter how badly they behave or how little respect they show to their father, they are sure of their share when he dies, and that he cannot in any way deprive them of it. The portion of which he can dispose in such a case is too small to be worthy of much consideration. The father is in this way deprived of much of the moral influence which he ought to exercise, and which it is highly expedient he should exercise, if he is a worthy and moral man. If his family consists of only one or two children, this reason against these laws is deprived of much of its weight. In such cases the law allows him to leave one-half or one-third of the whole land, according as he has one or two children, to any one he pleases, and consequently he is able to affect his child or children seriously by his will if they prove unworthy.

The English law is still more open to this objection. When an estate is settled and tied up for several lives or many years, the son who is to succeed knows that nothing he does, no disobedience or disrespect he shows, no immorality or debased character he exhibits, can affect his rights as successor. He may show himself to be a spendthrift or a villain; he may treat his father with utter contempt; he may become the companion of swindlers of the worst description; but the estate is sure, if he lives, to become his own. And it is this knowledge and this result of our settlements, deeds, and wills which have utterly destroyed the influence of many a good father, and ruined in morals and character thousands of sons. How far the limited effect of this consideration, so far as the French system is concerned, militates against the vast benefits conferred by that system, only time, education, and experience can explain.



3. Another evil arising from the French system of compulsory subdivision on the death of the owner in those countries in which this system is in force, and in which the yeoman and peasant farmer are not educated, is this: A great number of farms come into the possession and ownership of uneducated yeomen and peasant farmers. Where these men are educated, and where many of their sons pass through good agricultural schools, as in Switzerland and Germany, there you find the farmers consulting one another about improvements, upon the qualities of manures and machinery, and upon the best means of making the most of their land. You find these also scientific farming advancing from year to year, and the produce of the land increasing and improving. But where little or nothing has been done for the real education of these classes, or for their training in scientific farming, although you may find wonderful industry, self-denial, and economy, and the most careful cultivation of the farms, you will also find that they farm, if I may say so, from tradition, from what they have heard from their fathers and neighbours; and you will find an unwillingness or an inability to receive new ideas, or to avail themselves of the improving knowledge of their own time in other countries. Of course this is an evil which education and time will cure, but it is an evil which, where education is wanting, is more observable in countries in which the land is much subdivided, than in those in which the land is cultivated by men of more capital and with better means of educating and training their children.

4. Another evil which results from this French system is that, as a general rule, it has a tendency to subdivide nearly all the great estates. I say a tendency, because in some countries, as in Belgium and France, spite of the stringency of this law, many large estates remain undivided and in the hands of the same family from generation to generation. But still, the tendency of the French law is as I have said. Now, I must say that, while I think it is a vast evil to do as we have done, and to shut out the peasants from all chance of buying land, and the small farmers from almost all chance of buying any, and to have so framed our laws that by far the largest proportion of land is tied up for generations in the hands of a few great owners, still, I think it is also a great evil to do away with large proprietors altogether. If they are good and intelligent men, they perform great and most important functions in the body politic, and are able, by their larger command of capital, to try experiments in scientific agriculture and in its machinery, and to encourage and promote many new improvements which poorer men would not venture upon until their success had been proved by others. Of course, this is only true where the great landowner is an educated, scientific man of business, who makes the scientific care of his estate the business of his life. No one grudges such a man the possession of many acres; and such a man, if he knew that he could not, as at present, prevent by any deed or will his estate from being sold after his death, would bestow infinite care on the proper education of the son whom he selected to succeed him, so that the estate might continue to be well and scientifically managed, and might not be sold or divided after his own death. And the son, as I have already pointed out, under such a state of law, knowing that the law did not secure the succession of the estate to him, as it does now, and that his father would not leave him the estate unless he fitted himself to manage it properly after his father's death, would be much more likely to fit himself by study for such management than now, when our law seems to do all it can to render the son, under one of our settlements or wills, wholly independent of the father's influence and wholly indifferent, and indisposed to educate himself for the scientific management of the estate. In these respects I have always been strongly of opinion that the immoral influence and results of our system of Land Laws was about as bad for the common weal as it could be.

And if the only choice before us lay between, on the one hand, continuing the injurious unfairness and the great moral evils resulting from our present system, or, on the other hand, adopting the French system even with its defects, I, for one, should not hesitate a moment in electing the French system, which, although open to the objections I have mentioned, at the same time promotes in such a wonderful degree the self-denial, the foresight, the wonderful industry, and the moral habits of the French yeomen and peasant farmers.

The following sentences extracted from Mr. K-y's previous letters seem to form a fitting conclusion to the above fragment:—

There is an intermediate system of Land Laws between the French system and our own, and my belief is that this system of laws, which is in force throughout the greater part of Germany, and other parts of Europe, is the right one.

It allows the owner to give, sell, or devise his land, or any part of it, to any one he pleases; but it does not allow him to tie it up by any instrument, so as to prevent its being sold after his death.

The land is always saleable. It is never tied up in the hands of men who have neither the capital nor the industry to cultivate it properly.

It is this system, and not the French or the English system, that I am in favour of.

## THE BRITISH FARMER'S POSITION.

At the last meeting of the Kingscote Agricultural Society, Mr. HENRY HOLBOROW, of Willesey, Tetbury, read a paper on this subject, as follows:—

"The British farmer" is supposed to stand at the head of his profession all over the world. He is the producer of the best cattle, the best sheep, the best pigs, and perhaps the best horses, that are known; and whatever improvements in live stock have been accomplished by the agriculturists of other countries have been brought about by their having recourse to the English breeder's herds and flocks. And as to the comparative amount of capital employed, of crops grown from soils anything but what may be termed "virgin;" of meat, cheese, and other farm produce, both as to quantity and quality, there is none that can come up-side with his. And if you consider him on the ground of progress, those who can remember some forty to fifty years back will be bound to admit that in general knowledge, in education, in improvements of all kinds, whether of living animals, of implements, of the general productions of the farm, or in any other particulars, his advance has been both rapid and striking. And putting all these things together, one would reasonably expect to find him now, not only going on to improve and increase his productions, but also that he himself had prospered in his undertaking, and had become comparatively rich. But such, alas! has been his disappointment from various untoward circumstances that we are come here together this evening to consider

### HIS PRESENT POSITION.

It is not the farmer's status in society which is meant by the word "position," but rather his present circumstances with regard to profit and loss; and I think I shall be able to prove to you as clear as daylight that the word "profit" is altogether out of the question. If you ask a banker, he will tell you that his farming customers who used to have a fair balance of account to the good have now a heavy amount to the bad, and still ask for more assistance. Ask the auctioneer, the cattle dealer, the corn merchant, the manure seller, the dealer in feeding stuffs and the like, and each and all will tell you that they cannot get in their accounts against farmers, whilst if they buy of them the money is immediately required. Ask any other tradesman in the habit of selling his wares to farmers, and he will tell you that he cannot get his bills paid. Only the other day I heard what two townsmen had to say on this matter, and men not far away. One said, "I have been forced to overdraw at my banker's to the tune of £500, simply because the farmers do not pay my bills;" and the other said, "I have been obliged to put £1,000 more into my business from the same cause." A gentleman in Staffordshire says—"Farmers are becoming poorer every day, if men are to be believed;" and, further, "Many farms are given up, and all the cold land and game farms are unlet, or let at reduced rents." An extensive valuer and land agent in Wiltshire says—"The past years have undoubtedly been disastrous to arable farmers; a great many farms change hands, and generally speaking at a reduction of rent, whilst a good many are unlet, and their numbers increase from year to year." This person also told me a short time ago that he had 4,000 acres on hand that he could not relet. Mr. Holborow proceeded to give a long list of witnesses to the same effect in all parts

of the country.] So much, then, as to the British farmer's present position; and let us now go on to consider some of

#### THE LEADING CAUSES

of all this; (1) the condition of the land. Here, at once, the question of cost of manual labour presents itself, as well as the difficulty in obtaining the kind of hands required. If you ask a farmer why his land so abounds with docks and thistles, he will at once reply, "Because I cannot now obtain the assistance of women, or cheap labour of any kind, as I could use to; the men are now so well paid that they can afford to keep their wives at home; the younger women are above going out to field work, and since the Education Act I cannot get boys as before." But this is not all, for the farming of the present day—to do it well—requires more hands than it ever did, and the rural population diminishes instead of increasing, whilst all the best of the men are either drafted off into the police, on to railroads, or migrate into the large cities, leaving the second-rate and the aged to do the farmer's work. This is a complaint urged by many, but I have not myself to complain so much as some of this difficulty, and I wish to be rightly understood. (2) Then, again, you have the large increase in wages, which is a serious item. Forty years ago an ordinary labourer's wage was reckoned at the rate of the value of a bushel of wheat per week: 25 years ago it did not much exceed that calculation, whereas now it takes nearly the market value of 3 bushels to pay the man for the same time; but this is not all, for the general testimony goes to show that that much less work is now done for the increased pay. I will call your attention, for a few minutes, to the replies I have received from several counties on this head. My Dorset friend says "labour is dearer by 30 per cent. than it was 15 years ago, whilst it is a commonly received opinion that men are not now as good by 12 to 15 per cent. as they were before their minds became corrupted by the Union delegates." [From North Wilts, from Staffordshire, from Berks, from Lincoln, from Oxon, and from Gloucester, similar testimony was quoted.] Gentlemen, this is a serious matter, and it is certainly one great cause of the tenant-farmer's difficulty, for an addition of 25 per cent. to his expenses is equivalent to a large increase of his rent. (3) Then as to other expenses, the carpenter, the blacksmith, the adder, and all other tradesmen have added fully one-third to their charges also. (4) Another thing that has told seriously against the farmer has been the untoward seasons of the last ten years; more especially the last four. In 1868 we had a dry summer; again in 1870, 1874, and 1876 very dry summers occurred, and each of these told strongly against the occupier of the soil. Much might be said on this head, as having to a great extent helped to diminish the amount of live stock in the country, from causing half-fatted animals to be killed from the want of food for properly making them up, thus causing three to be killed to make up for the weight of meat that would otherwise have been found in two. Add to this the foot-and-mouth disease that traversed the country in 1872, the loss to the farmer from which would doubtless amount to millions of pounds sterling, could the real facts be got at. An average loss of 50s. to every head of cattle attacked, of 5s. to every sheep, and of a much larger percentage to every pig. But the corn crops of the last four seasons are well known to have been below an average, whilst the prices obtained for the same have become increasingly less until they may now be said to be ruinous outright.

#### THE FARMER'S FUTURE PROSPECT.

Will his expenses become less? Will his labour cost less? Will his produce become more valuable in the market? I greatly fear that neither of these questions can be answered in the affirmative, and if not, then is the prospect bad indeed, and at the risk of being laughed at as a "croaker," I will hesitatingly say that never in my life before did the outlook seem so cheerless. It is a common saying that, "When things have come to the worst they generally begin to mend," but whether they are come to the worst or not no one can tell. Seasons may be better, and of the seasons we should not raise a murmuring complaint, but supposing they are, and the crops good, yet no one can afford to sell them at the present low prices, whilst the foreigners show that they not only can, but that they will supply our market to any extent at the present low prices; and this does not apply to corn only, for cheese and other provisions, on the sale of which the British farmer depends, are literally flooding our markets, whilst the same

prospect seems to be looming ahead with respect to the supply of meat. The legislature throws increased burdens, in the way of rates, upon him; everything that can be done is done to lower the price of his produce; all the world thus becomes his competitor; and hitherto his rent has been strained to the highest pitch; whilst his hands have been more or less tied by restrictive covenants, and by lack of proper building accommodation for his live stock.

#### REMEDIES.

Reduced rents at once present themselves as first requirements. Come they will, and I think I have already shown pretty clearly that coming they are. Those landlords who first submit will eventually prove to be the wisest men, for the others have every chance of getting their land thrown on to their own hands, and that will be tantamount to no rent at all. But there is yet a way open, if they will but accept of it. Increased cottage accommodation is a positive necessity, whether the mere interest of money expended be realised or not; and surely everybody must perceive that the greater the population in any place the greater the value of the land around. Increased accommodation for live stock is another necessity on by far the majority of farms, and this must be provided—not on the principle of increased rent, but on the principle of helping the farmer to compete with his rivals in the market. All other necessary improvements and accommodations must be provided; in fact, nothing must be left undone. But above all things the landowner should be careful to place his property in the hands of an agent who well understands the farmer's requirements, the way to meet them, how to give him full liberty of action, and yet know when and how to restrain the unscrupulous and exhausting tenant. For this purpose a resident agent should be a leading desideratum, where the property is of sufficient extent, and not (as now in so many cases) a person living right away, almost inaccessible to the tenant, and in lots of instances as ignorant of farming matters as the farmer is of law or physic. But some will urge that a better class of tenants should be selected, and especially men with plenty of capital; but what sense is there in talking about selection when no tenant at all is forthcoming? and where is the man with large capital so foolish as to employ it in a business that is already shown not to pay? Of course everybody knows that a thing must be done well to answer well, but the cry of increased capital in a losing game will spend itself in vain unless some inducement can be shown to attract it. This, with high rents, bad accommodation, restrictive covenants, and bad security, is not likely to come to pass. Others propose that the farmer should return to the old style of early rising, a smock frock, and bacon for dinner; and yet, forsooth, he must be a man of capital! Ah, yes, a "varmer"—just a step above his labourer, but not quite so well educated! But these wisacres must yet learn that capital and intelligence must have their position and reward as much amongst farmers as any other class. The legislature should do their part, by ameliorating the burden of rates instead of increasing it; by moderating the income-tax to one-third instead of one-half the rent as a criterion of profit, and by removing that unjust thing, the malt tax. To ask for protection is at present useless, and any attempt to force down the cost of labour is not to be recommended. Of course the practice of economy should be resorted to as much as possible by all those who find their means diminishing, whilst those who still have a little capital left had better quit at once than stay till all is lost. Before sitting down, I am desirous to state that in all I have said not one single shadow of reflection has been intended towards any one person or estate either as to management or otherwise, whatsoever.

**CHEAP LAND.**—The following story, which comes of me from Bath, will be read with interest by all concerned in the nature of the securities of the City of Glasgow Bank. An esteemed officer of the Corporation met the other day with a friend who had lately returned from Australia. In the course of conversation, the Australian gentleman mentioned that he had left behind him an estate of ten thousand acres, "and," he added, "I'd willingly sell it at a penny a thousand." "Done," said his companion, "drawing a shilling from his pocket. The vendor was as good as his word. He brought the title deeds, and the transaction was completed on the spot.—*Mayfair.*

## BIRMINGHAM AND MIDLAND COUNTIES FAT STOCK SHOW.

The thirtieth annual show of fat cattle in connection with this Association was opened at Bingley Hall on Saturday, the 30th of November. The first impression we received of the Cattle classes was a disappointing one, and an examination in detail did not altogether remove it. But, whilst the absence of any very extraordinary good cattle gives a sort of mediocre tone to the exhibition, the general quality is good. It cannot be said to be a better show than that of last year, yet we think the animals are better finished than they were then. The championship falls to a cross-bred Scot possessing some points of great merit, but not a very perfect animal: undoubtedly it is the best butcher's beast in the show, and fairly wins its honours. There are one or two first-rate show animals in each of the divisions very much out of the common way of show things. The Sheep are good; the Shropshires and Southdowns form two divisions of very considerable merit. There is also a good show of Pigs. The entries compared with last year are as follow:—

	1878.	1877.
Cattle .....	124	113
Sheep .....	91	69
Pigs .....	73	64
Total.....	288	Total... 246

But a considerable percentage of them were not in their places. The prize list is on the usual liberal scale, and there are additional prizes offered this year of great value, which will be noted in their places. All available space in the Hall is crowded with exhibits of machinery, corn, roots, &c.; and there is a large show of poultry.

## CATTLE.

First on the list are the Herefords; a small division with not more than two really first-class animals in it. In the class for oxen exceeding four years old there are only two entries, and only one exhibit; this is a five-year-old ox bred by Mr. D. Edwards, of Brinsop Court, and exhibited by Mr. H. Page. It takes the first prize, and is an animal of some merit, being fine in the bone, deep and thick in front, good on the loin, back, and chine; but he handles loose on his ribs, is a little flat on his sides, and falls off in his thighs and flank—just as over-aged beasts will do. However, his quality is undeniable. A very different animal is the first prize exhibit in the next class, for steers between three and four years of age, which takes the additional prize of £100 for the best Hereford in the Hall. This bullock was bred by Mr. J. Price, of Pembridge, and is exhibited by Mr. F. Platt, and handles very differently to the last; he is full of lean flesh, very deep and thick, and is square and level, though rather short. His roasting meat is first-rate; he has full rounds and twist, and a level rump, but is rather coarser in the bone than Mr. Page's bullock. Altogether this is a first-class Hereford, and would hold his own in a much stronger class. The second prize fell to Mr. P. A. Pike for a fairly good show bullock, a good handler, and a butcher's beast all over. Mr. Pritchard's bullock, which takes the third prize, is rather shelly for a show beast, and light in front. This completes the class. The steers,

not exceeding three years old, are only four in number; Mr. Platt is again first with an animal bred by Mr. F. Evans, of Bredwardine, a small and neatly-finished steer; Mr. W. Taylor takes second with a thicker-fleshed animal of his own breeding; and Mr. Rees Keen's third-prize bullock, of his own breeding, though faulty in his rump, handles well and is full of flesh. One cow exhibited by Mr. T. Farmer, a very fat, unevenly-fed animal, constituted a class by itself, and was awarded a first prize. The heifers were four in number, Mrs. Sarah Edwards' Beatrice being first on the list, and constituting the second first-rate Hereford in the Show. Mr. Pritchard takes second prize with a fairly good heifer of his own breeding, rather light in front. Mr. Alfred Darby shows a nice quality heifer, good in his chine and back, but with very unsightly hind quarters, and Mr. Pike's heifer is very thick and heavy, though unevenly fed. As a division of the Show the Herefords were few in number, and as a whole not as good as they were last year. Compared with 1876 they are a long way behind.

The Shorthorns are in good numerical strength, and in the several classes some very useful beasts may be found; but perhaps there is not more than one really first-class animal—the heifer bred and exhibited by the Rev. Bruce Kennard. In the class for oxen exceeding four years old there are only three exhibits, the first prize going to a fairly good and very heavy Shorthorn bred by Mr. Bedford, of Paris, Kentucky, and exhibited by Messrs. Bell and Son, of Glasgow. The other two bullocks are a big rambling beast exhibited by Mr. R. Fowler, and a very uneven bullock with some few good points shown by Mr. R. Wright. But neither of them were considered by the judges to be deserving of the second prize, and consequently it was not awarded. None of the prize animals in the class for steers between three and four years old are much out of the common way, or above the ordinary Showyard standard. Amongst steers not exceeding three years old there is better competition for the prizes, and the quality is somewhat better. The cows form a fairly good class of 14 entries; and the heifers form a small but good class of four animals. Mr. E. Hubbard's first prize animal, bred by himself, which takes the £100 extra prize awarded to the best Shorthorn in the Show is rather bare on the shoulders, and faulty in her quarters, having a plain rump, narrow thighs, and small twist, but is good over the back and loin. Colonel Lloyd-Lindsay's second prize heifer is very nice quality, and better beef than the other, but 14 months difference in age is too much vantage ground to give her opponent. The Rev. — Kennard's heifer is in an extra class and will be noticed in due course. In the Shorthorn classes, proper, the animals were useful, but not of any great show merit.

The Devons were a small division. In the class for oxen or steers of any age Mr. St Kidner's three-year-old bullock took first honours, and the fifty guineas extra prize for the best Devon. This is a pretty little bullock of no great thickness, but very ripe and level; a long way behind Mr. Kidner's ox of two years ago. Mr. Bates' second prize is an excellent bullock, very firm, and good all over. Mr. Riden's cow would be a first-class animal if it were not for a faulty rump. The Longhorns number ten animals in the two classes; some of them are very full of firm flesh, but they are unsightly and very uneven; their backs are well covered, but they are flat ribbed, and carry very hard thick hides. The Scotch polled cattle are good, but not so good as they have been at Birming-

ham. Mr. McCombie's first prize bullock is a first rate animal, and full of such meat as can only be found on Scots or Scots crosses. He takes the £50 extra prize for the best Scots in the pure-bred classes. The Earl of Galloway's second prize animal is smaller, but of excellent quality. Mr. McCombie's first prize cow is not perfect, but still a very capital Scot. There are four West Highlanders, all of them good butchers' animals, but nothing of unusual excellence. The Duke of Roxburghe's first prize bullock is a mellow handler and well furnished with excellent beef. Sir Walter Trevelyan shows two good heifers. The cross-breds, as a division of the show, are not as good as they were last year; but they furnish the champion of the show, and a very capital bullock he is. This beast is out of a polled Scot cow by a Shorthorn bull, a cross which furnishes the best butchers' beasts in this country or any other; nothing can equal it for size and wealth of first-rate beef. It is highly satisfactory to find the first honours of a fat stock show fairly awarded to a butchers' animal, for this is by no means the case as a rule; had the judges been butchers and salesmen they could not have done better in this particular instance. Indeed, the judging at Bingley Hall leaves very little to find fault with; they ignored every consideration but beef, and set an example which we trust will be followed on similar occasions. This cross-bred is very massive in front, of wonderful thickness, and a perfect handler, but he is a trifle uneven all over—just sufficiently so to take him out of the list of superlatively good animals—such as Mr. McCourtie's *Black Prince*, and Mr. Kidner's Devon, in their day. He secures the £50 extra prize for the best animal in the cross-bred and extra classes, Messrs. Gibb's 100 Guinea Prize for the best animal in the cattle classes, and the One Hundred Guinea Elkington Challenge Cup, which was won in 1873 by Mr. E. Wortley, Ridlington, Uppingham; in 1874 by Mr. Robert Wright, Nocton Heath, Lincoln; in 1875 by Mr. Richard Stratton, The Duffryn, Newport, Monmouth; in 1876 by Mr. Samuel Kidner, Bickley Farm, Milverton, Somerset; in 1877 by Mr. Richard Stratton, The Duffryn, Newport, Monmouth. He also Mr. Thorley's prize of £30.

Amongst the cross-bred cows and heifers, Mr. Ratcliff's cow is an excellent show animal and a good butcher's beast; the two other exhibits are mediocre. Amongst the oxen, steers, cows, and heifers "not eligible for any of the preceding classes," there is to be found the best Shorthorn in the show—Rev. Bruce Kennard's 4 years and 3 months old heifer *Iole*, her age preventing her being exhibited in the Shorthorn heifer class, and as a barren she could not compete in the cow class. This animal is of fine quality, but handles soft and is doubtless covered with fat; but she is level and fine in the bone, has a perfect chine, back, loin, and rib, is first-rate behind her shoulders, in her ramp, and in her rounds and twist—altogether a first-rate Shorthorn, good where Shorthorns are usually weak or bad. She contested with Mr. McCombie's Scot, the President's prize for "the best animal of any breed or age, to be bred and fed by the exhibitor," and the decision was a very slow one; eventually, however, the Scot was sent empty away and the heifer took the cup value £25. No doubt the Shorthorn was a better Shorthorn than the Scot was a Scot, for he is a little weak behind his shoulders; but there can be as little doubt that the Scot was a better butcher's beast than the Shorthorn. He is worth more per lb., and is a heavier beast; if the judges had been butchers they would probably have given the cup to the Scot. This is about the only fault we have to find with them, and it must be confessed the point is a difficult one which requires to be clearly defined; it goes to the very bottom of fat-stock judging. There is nothing else in those classes of special

interest except a big rambling American bullock exhibited by Messrs. J. Bell & Sons; he has good chine and carries some meat on him, but is bare on the shoulder and flat-ribbed. Altogether the cattle classes cannot be said to be first rate at Birmingham this year.

#### SHEEP.

The standard in this department of the show is a high one, and probably has not been exceeded at Birmingham. The Shropshires were in strong force, as might be expected from the locality, and they are good. Lord Chesham's pen of three wethers not exceeding twenty-three months old is turned out of hand in his usual style; the sheep are very neat and very fat; they take the first prize. Lord Chesham also takes second prize with sheep of good scale and quality, not so evenly matched. The third award goes to Mr. J. Beach for rather small sheep, but they are excellent handlers and perhaps better Shropshires than those put before them. In the class for older wethers Mr. J. Coxon, of Lichfield, is first with a pen of very capital sheep of good Shropshire character, good legs of mutton and handling well all over. Lord Chesham's second prize lots do not handle so well, and are narrow behind. In the class for single wether sheep Mr. H. J. Sheldon is first with a very pretty and very excellent sheep, but he is a little weak in his back. Mr. R. E. Oliver's second prize is a bigger sheep, good in front, but not particularly so in his twist. Mr. F. Beach's third prize sheep is a soft handler, cut very neat. This is scarcely as good a class as the preceding. Of Southdowns there were 12 entries, and Lord Walsingham was, as usual, to the front. His first prize pen of wethers were small but perfect, of rare quality and full of mutton; these sheep take Messrs. Gibb's £50 extra prize for the best pen of sheep in the show, and they fairly earn it. Lord Walsingham also takes the second prize, with a pen of undeniably good quality, well breeched but not handling all alike. Sir F. M. Fitzwygram is third, with a pen of Mr. Penfold's breeding. Mr. A. Brasey is first and second with good wethers in the Oxford Down Class, and a very useful pen of sheep bred and exhibited by Mr. C. Howard takes the third place. For Hampshire Downs Mr. A. Morrison meets with no competition and secures first and second prizes, as well as a high commendation, for his three exhibits. The small show of Lincolns, Leicesters, and Cotswolds were all fairly show sheep. Mr. Walter Farthing is awarded first and second prizes for his two pens of Dorsets, which are excellent sheep of their kind; and Sir F. W. Fitzwygram takes a first prize for a pen of cross-breds from the flock of Mr. E. B. Green, of Stanstead. These sheep are of Southdown character, but have plenty of scale, and are firm handlers. The Ewe Classes are badly filled, except the one for Southdowns, in which Mr. Coleman is the winner.

#### PIGS.

There are more entries than last year, and the quality throughout is good. Mr. R. Hall's pen of three not exceeding ten months old, and of one litter, are very fine animals indeed. Lord Chesham's pen of three older pigs are large and very symmetrical black pigs. For single pigs, over fifteen months old, the Earl of Ellesmere wins with a white pig of great size and yet good quality. The Berkshire breeding pigs are very nice, and very excellent quality as usual. Mr. T. Holford, of Market Harborough, takes the first prize with very neat animals, but they have not much hair on them. In the classes for "other large breeds," the "middle breed," and a "small breed," the names of the Earl of Ellesmere, Mr. Peter Eden, and Mr. Duckering occur with the usual regularity, and the red-haired Tamworth breed still retain a place in the show.

Those who had not finished a critical examination of the stock in Bingley Hall by the time the electric light

experiment came into play found great inconvenience therefrom. The light was intermittent, and very trying to the eyes; at no time giving a useful and practical light in the Hall, but producing a variety of undesirable effects. A lurid glare, as from a conflagration, would be thrown over the immediate vicinity of the apparatus, at each end of the Hall, and the next moment it reminded one of moonlight in the tropics; then a few flashes as of summer lightning, to be succeeded by the gloom of gas-lights turned down low. Perhaps it will be admissible to describe the picture presented by Bingley Hall under electric light as a "nocturne" in which nothing was distinct but the shadows. As an experiment it might have been interesting, but the effect—up to six o'clock at least—was anything but pleasant. Perhaps it may be better managed during the remaining term of the show.

## LIST OF JUDGES.

### CATTLE.

J. BRUCE, Ruthwell, Annan, N.B.  
G. GARNE, Churchill Heath, Chipping Norton.  
J. W. JAMES, Mappowder, Blandford, Dorset.

### SHEEP.

T. FULCHER, Elmham, Dereham, Norfolk.  
C. HOBBS, Maisey Hampton, Fairfield.  
T. MANSELL, Harrington Hall, Shifnal.

### PIGS.

J. DALE, Spetchley, Worcester.  
C. RANDELL, Chadbury, Evesham.

### CORN.

R. F. TODD, Calthorpe Road, Edgbaston.

### ROOTS.

C. CORBETT, Broad Marston, Stratford-upon-Avon.  
A. WATTE, Prescott Manor, Banbury.

### POTATOES.

A. F. BARRON, Chiswick, London.  
W. MILLER, The Gardens, Combe, Coventry.

### POULTRY.

J. BAILY, Mount Street, Grosvenor Square, London.  
J. DIXON, North Park, Clayton, Bradford.  
E. HEWITT, Eden Cottage, Sparkbrook, Birmingham.  
W. R. LANE, New Street, Birmingham.  
J. H. SMITH, Skelton, York.  
R. TEEBAY, Fulwood, Preston.

### PIGEONS.

T. J. CHARLTON, Blenheim Road, Manningham, Bradford.

F. ESQUILANT, Effra Road, Brixton, London.  
H. CHILD, Long Street, Sparkbrook, Birmingham.

## PRIZE LIST.

### HEREFORDS.

Hereford Oxen, exceeding four years old: 1st, H. Page, Walmer, Kent.

Hereford Steers, exceeding three and not exceeding four years old: 1st, and also £100, for the best Hereford in the show, F. Platt, Hereford; 2nd, P. A. Pike, Mitton, Tewkesbury; 3rd, J. Pritchard, Stanmore, Bridgnorth.

Hereford Steers, not exceeding three years old: 1st, F. Platt, Hereford; 2nd, W. Taylor, Ledbury, Herefordshire; 3rd, R. Keene, Caerleon, Mon.

Hereford Cows: 1st, T. Farmer, Bromfield, Salop.

Hereford Heifers, not exceeding four years old: 1st, Sarah Edwards, Leominster, Herefordshire; 2nd, J. Pritchard, Stanmore, Bridgnorth.

### SHORTHORNS.

Shorthorn Oxen, exceeding four years old: 1st, R. Wright, Nocton Heath, Lincoln; no second prize was awarded.

Shorthorn Steers, exceeding three and not exceeding four years old: 1st, R. Stratton, Newport, Mon.; 2nd, J. J. Colman, M.P., Norwich; 3rd, R. Wortley, Aylsham, Norfolk.

Shorthorn Steers, not exceeding three years old: 1st, A. E. W. Darby, Shrewsbury; 2nd, J. Laycock, Newcastle-upon-Tyne; 3rd, W. H. Potterton, Northampton; highly com-

mended, W. H. Hewett, Taunton.

Shorthorn Cows: 1st, W. Cottrell, Thame, Oxon; 2nd, R. Stratton; 3rd, H. Chesters, Nantwich; highly commended, J. A. Rol's, Monmouth, and R. Ratcliff, Burton-on-Trent.

Shorthorn Heifers, not exceeding four years old: 1st, E. Hubbard, Lowestoft, Suffolk; 2nd, Col. R. Lloyd-Lindsay, V.C., M.P., Wantage, Berks; 3rd, W. O. Foster, Shifnal Salop.

### DEVONS.

Devon Oxen or Steers, of any age: 1st, S. Kidner, Milverton, Somerset; 2nd, I. Bate, King's Heath; 3rd, W. Fryer, Poole, Dorset; highly commended, Prince of Wales, K.G.

Devon Cows or Heifers: 1st, T. H. Hiden, Taunton; 2nd, J. Walter, M.P.; 3rd, Mrs. Maria Langdon, North Molton, Devon.

### LONGHORNS.

Longhorn Oxen or Steers, of any age: 1st, R. Hall, Thulston, Derby; 2nd, S. Forrest, Kenilworth.

Longhorn Cows or Heifers: 1st, R. Hall, Thulston, Derby; 2nd, W. P. Burbury, Stratford-upon-Avon.

### SCOTCH BREEDS.

Polled Oxen or Steers, of any age: 1st, W. McCombie, Aberdeen; 2nd, The Earl of Galloway; commended, J. Reid, Aberdeenshire.

Scotch Polled Cows or Heifers: 1st, W. McCombie, Aberdeen; 2nd, W. Harvey, Bury St. Edmunds.

West Highland Oxen or Steer: 1st, The Duke of Roxburgh, K.T.

Scotch horned Cows or Heifers: 1st and 2nd, Sir W. C. Trevelyan, Bart., Newcastle-upon-Tyne.

### CROSS-BRED ANIMALS.

Fat Oxen, exceeding four years old: 1st, Lord Lovat, Banly, Inverness-shire; 2nd, W. S. Cragg, Carnforth.

Fat Steers, exceeding three and not exceeding four years old: 1st, Lord Lovat, Beaumont Castle; 2nd, R. Wortley, Norfolk.

Fat Steers, not exceeding three years old: 1st, W. H. Hewett, Taunton; 2nd, J. and W. Martin, New Market, Aberdeen; 3rd, R. Thomas, Barchurch, Salop.

Fat Cows or Heifers: 1st, R. Ratcliff, Burton-on-Trent; 2nd, J. Reid, Greystone, Alford, Aberdeenshire; 3rd, Lord Lovat, Beaumont Castle.

### FOR ANIMALS NOT ELIGIBLE FOR ANY OF THE PRECEDING CLASSES.

Oxen or Steers, of any age: 1st, J. Walker, M.P., Bearwood, Wokingham; 2nd, J. J. Colman, M.P., Norwich.

Cows or Heifers, of any age: 1st, the Rev. R. B. Kennard, Marshull, Blandford; 2nd, the Rev. W. Sneyd, Newcastle, Staffordshire; highly commended, J. J. Colman, M.P., Norwich; commended, the Rev. W. Sneyd, Newcastle, Staffordshire.

### SHEEP.

#### LEICESTERS.

Three Fat Wethers, not exceeding 23 months old: 1st, Mrs. Herrick, Leicestershire; 2nd, B. Painter, Oakham, Rutland.

#### LINCOLNS.

Three Fat Wethers, not exceeding 23 months old: 1st, C. Sell; 2nd, C. Lister, Lincoln.

#### COTSWOLDS.

Three Fat Wethers, not exceeding 23 months old: 1st, S. Smith, Deddington; 2nd, T. R. Hulbert, North Cerney, Cirencester.

#### SOUTH-DOWNS.

Three Fat Wethers, not exceeding 23 months old: 1st and 2nd, Lord Walsingham; 3rd, Major-General Sir F. W. Fitzwygram, Bart., Havant, Hants.

#### SHROPSHIRE.

Three Fat Wethers, not exceeding 23 months old: 1st, Lord Chesham; 2nd, Lord Chesham; 3rd, J. Beach, Prinkridge; 4th, F. Beach, Salop; highly commended, H. Lovatt, Wolverhampton.

Fat Shropshire Wether, exceeding 25 and not exceeding 36 months old: 1st, John Coxon, Lichfield; 2nd, Lord Chesham.

Fat Shropshire Wether, not exceeding 23 months old: 1st, H. J. Sheldon, Warwickshire; 2nd, R. E. Oliver, Towcester; 3rd, J. Beach.

#### OXFORDSHIRES.

Three Fat Wethers, not exceeding 13 months old: 1st and 2nd, A. Brasse; 3rd, C. Howard, Bedford.

**HAMPSHIRE, WILTSHIRE, AND OTHER DOWNS.**

Three Fat Wethers, not exceeding 23 months old: 1st, 2nd, and highly commended, A. Morrison, Tisbury, Salisbury Wills.  
**SHEEP NOT QUALIFIED TO COMPETE IN ANY OTHER CLASS.**

Three Fat Wethers, not exceeding 23 months old: 1st and 2nd, H. Farthing, Bridgewater.

**CROSSBREDS.**

Three Fat Wethers, not exceeding 23 months old: 1st, Major General Sir F. W. Fitzwygram, Bart., Havant, Hants; 2nd, W. Wells, Peterborough; highly commended, C. Sell, Boston.

**EWES.**

Fat Leicester Ewe, having bred one or more lambs: Silver medal, Eric Sutherland, Morayshire, N.B.; highly commended, E. Sutherland, Morayshire, N.B.

Fat Lincoln Ewe, having bred one or more lambs: Silver medal, C. Sell.

Fat Cotswold Ewe, having bred one or more lambs. In this class the prize was withheld, the exhibits not being of sufficient merit.

Fat Southdown Ewe, having bred one or more lambs: Silver medal, J. J. Colman; highly commended, Major-General Sir F. W. Fitzwygram, Bart.; highly commended, C. Clapham.

Fat Shropshire Ewe, having bred one or more lambs: 1st, B. J. Sheldon; 2nd, R. Wyatt.

1st Oxfordshire Ewe, having bred one or more lambs: Silver medal, A. Bawsey, Chipping Norton.

Fat ewe of any other pure breed, having bred one or more lambs: Silver Medal, A. Morrison, Tisbury; commended, H. Farthing.

**FAT PIGS.**

Three Fat Pigs of one litter, not exceeding 10 months: 1st, R. Hall, Thelston, Derby; 2nd, A. Crowther, Bury, Lincolnshire.

Three Fat Pigs of one litter, not exceeding 15 months old: 1st, Lord Chesham; 2nd, W. Wheeler, Ship-ton-on-Stour.

1st Pig, exceeding 15 months old: 1st, The Earl of Ellesmere; 2nd, R. Lacey, Wulton, near Loughborough.

**EXTRA PRIZES**

Messrs. Gibbs's 100 guineas prize for the best animal in the cattle classes—Lord Lovat. The Elkington Challenge Cup—Lord Lovat. The £100 prize for the best Hereford—H. Page. The £100 prize for the best Short-horn—E. Hubbard. The 50 guineas prize for the best Devon—S. Kidner. The £50 prize for the best pure-bred Scot—W. McCombie. Lord Chesham's prize of £25 for the best animal bred and fed by the exhibitor—Rev. B. B. Kennard. Mr. Thorley's £30 (with £10 to the herdsman) for the best animal fed on Thorley's condiment—Lord Lovat. Messrs. Gibbs's £50 prize for the best pen of sheep—Lord Walsingham.

**CORN.**

There were 21 entries in this division of the show, nearly all of which were filled up. There was, however, only one entry of Talavera—a rather coarse sample, and not a particularly bright one, grown by Mr. Hopkins, of Tewkesbury: the first prize was awarded to it. There were nine entries of other white wheats in place. The first prize fell to Sir G. A. Clayton, of Maidenhead, for a clear, thin-skinned sample of Chidham; Mr. R. Fowler, of Aylesbury, taking second with a fairly good sample of Essex rough chaff. The red wheats were poor, and showed plainly how much the season has told on quality; in fact, this is only now beginning to be realised, and the earlier pictures of the harvest of 1878 are sensibly fading under the light thrown upon them by the thrashing machine. Closer observers, however, have never held very sanguine expectations as to the quantity or quality of this season's crop. Mr. J. Greatorex, of Burton-on-Trent, took first prize for a middling sample of what appeared to be nursery wheat. There was a fair show of barleys, numbering ten entries. M. J.

Malden, of Biggleswade, was awarded first prize for a fine sample of Hallett's Pedigree, which wanted a little more chumping, as there was here and there an awn to be found in it. Mr. Lythall's second prize lot was full-bodied, but not so even, nor as good in colour. The white oats were very creditable. Black oats were not equally good, Mr. Stilgoe's first prize sample of Hallett's Pedigree being the only decent lot, and that not first-rate. There were seven entries of beans, and the quality was fairly good in all—nothing out of the way in any one instance. The peas were not quite as good a class as the beans; but Sir G. A. Clayton's sample of blues was a very pretty one.

**ROOTS.**

These formed a large and very interesting part of the show, both in respect of the competition for special prizes and the displays made by the leading seedsmen. There are no very symmetrical roots to be found anywhere this season, not even in shows, but that has been the effect of a very unfavourable season, and is not the fault of the firms whose seeds have now become above all suspicion, and thoroughly to be depended on for quality and genuineness. Mangel crops throughout the country are variable, and Swedes are short—the average short—in quantity, and not as shapely as usual; but there appears to be no deficiency in the feeding value of any of the root crops, and the common turnips have seldom been better. The first class in this section was for a silver cup, or other article of plate, of the value of six guineas, offered by Messrs. Proctor and Ryland, of Birmingham, as a prize for the best collection of the three following varieties:—namely, Long Mangel Wurzel, Globe mangel Wurzel, and Swede—six roots of each to be shown. The competition was good, ten entries being shown. Mr. Burn Blyth took the cup with roots grown from Messrs. Sutton's seeds, not very shapely, but sound useful feeding stuff. Mr. Grist's roots were heavy, and Mr. Penn showed some large Kinner Globe mangels from Messrs. Webb's seeds. There was also a decent exhibit from the Birmingham Sewage Farm. Class 2 was for a silver cup, value six guineas, offered by Messrs. Morris and Griffin, Ceres Works, Wolverhampton, for the best twelve Swede turnips and twelve Globe mangels, in which Messrs. G. and J. Perry were the winners. Their exhibit consisted of large and good Swedes, and small but pretty quality mangels. Mr. Burn Blyth also showed some excellent mangels grown from Messrs. Sutton's seeds. There were six entries. Class 3 was for a silver cup, value five guineas, offered by Messrs. Sutton and Sons, Royal Berkshire Seed Establishment, Reading, as a prize for the best collection of the three following varieties:—namely, Six Mammoth Long Red mangels, six Globe mangels, and six Golden Tankard Yellow-fleshed mangels, for which seven entries competed. Mr. Champion, of the Reading Sewage Farm, won this cup with some of the very fine roots shown at Messrs. Sutton's Reading Show, and wonderfully good roots they were, as has already been stated in these columns. Mr. Ancombe, manager of the Birmingham Sewage Farm, also had some large good roots, and Mr. Burn Blyth's were of excellent quality. Class 4, for a silver cup, value five guineas, offered by Messrs. James Carter and Co., of High Holborn, London, as a prize for the best collection of the four following varieties:—namely, Six Imperial Hardy swedes, six Mammoth Long Red mangels, six Prize Yellow Globe Mangels, and six Intermediate Mangels, was won by Mr. Cave, of Rickmansworth, with a very capital lot of roots; the long reds were shapely and heavy, and the Globes and Intermediates were exceptionally fine. The Birmingham Sewage Farm also contributed some capital mangels; and Mr. Lythall's

exhibit was a good one. Class 5 was for the best six specimens of kohlrabi, the first prize being taken by Messrs. G. and J. Perry, and the second by Mr. Hunt, with Messrs. Webb's seeds. The class was a fairly good one of seven exhibits. Class 6, for Long Mangel Wurzel, with an extra prize offered by Messrs. Proctor and Ryland, was headed by Mr. Champion, of the Reading Sewage Farm, and the second prize was awarded to Mr. Ancombe, of the Birmingham Sewage Farm. The mangels were good in this class, and it is a little singular that Long Red mangels—usually so difficult to grow in good shape—are seemingly more true to type than any other roots this year, common turnips excepted. There were eleven good entries in this class, Mr. Burn Blyth and Mr. Cave obtaining commendations. Class 7 was for Globe and Intermediate varieties of Mangel wurzel, with an extra prize added by Messrs. Proctor and Ryland. This was a large and good class of 15 entries, in which Mr. Champion won with large and shapely specimens of Sutton's yellow Intermediate, grown on the Reading Sewage Farm. Mr. J. Cave's second prize entry of Intermediates were large and of sound quality, but not quite so uniform. Mr. Hunt showed some heavy Yellow Globes grown from Messrs. Webb's seeds, and Mr. Penn's exhibit of Webb's Colonel North mangel was a very creditable one. Messrs. G. and J. Perry also showed some very pretty Kinver Yellow Globes, small but neat and true. Class 8 was for a silver cup, value five guineas, offered by Messrs. Sutton and Sons, for the best twelve specimens of the Champion Purple-top swede, in which Messrs. G. and J. Perry and Mr. J. W. Griffin were the only exhibitors, the former obtaining the cup. These roots were not particularly good. Class 9, a silver cup, value five guineas, offered by Messrs. Webb and Sons, Wordsley, Stourbridge, for the best twelve roots of the Imperial swede, was fairly won by Messrs. G. and J. Perry with large and good roots, Mr. Foster's exhibit being of nice quality, small in the neck and of good shape. In a much larger open class of 13 entries for swedes of any variety, Messrs. Perry are also the winners. There was a good class for Common Turnips, a small one for Yellow-fleshed turnips, and some capital carrots. The cabbages were a fairly good show. There was a large and good collection of Potatoes, Mr. Peter McKinley and Mr. James Pink being the principal prize-takers.

The entries of corn were 58, of roots 112, and of potatoes 116.

#### SEEDMENS' STANDS.

The several root shows of our leading seedsmen have recently been described in detail in these columns, so that a short notice of each stand must now suffice. Those who have been in the habit of seeing these displays will be prepared to believe that in each case they were tastefully arranged, and did great credit to the respective firms. Messrs. Carter and Co., of High Holborn, London, had an imposing stand on which a large number of roots grown from seeds supplied by them were exhibited. Amongst the growers whose produce contributed to make this stand were to be found the names of Her Majesty the Queen, and his Royal Highness the Prince of Wales, his Grace the Duke of Northumberland, the Right Hon. Lord Redesdale, the Right Hon. Lord Clinton, the Right Hon. Lord Foley, the Right Hon. the Earl of Harrington, the Right Hon. Lord Warwick, the Right Hon. Lord Soules, Sir William Farquhar, Sir Curtis Lampson, Sir Charles Russell, Admiral Sir G. N. B. Middleton, Sir Richard F. Sutton, Major Allfrey, Central London District Schools East Barnet Local Board, Mrs. Morten (Ballif, Mr. Cave), Her Majesty's Convict Prison, Woking; Bedford Urban Sanitary Authority, Middlesex County Asylum, South Metropolitan District Schools, Professor Buckman, Lord Warwick, and Birmingham,

Tame, and Rea District Drainage Company, Express Milk Company, Eton Local Board, and a whole host of landed gentry representing customers of Messrs. Carter, and as these customers are not confined to the United Kingdom there were to be seen specimens of mangel from Canada grown from their seeds, amongst which a long Led weighing 54lb., and a Yellow-fleshed Tankard weighing 32½lb., were subjects of interest to on-lookers. Their Warden Yellow Globes were well represented, and amongst the turnips those from the Duke of Northumberland, the Pomeranian White Globe, were especially noticeable.

Messrs. Sutton and Sons, of Reading, had, as usual, a very effective Stand, on which was an excellent collection of their well-known varieties of roots. Their Golden Tankard yellow-fleshed mangel, though not so perfect and handsome as in more favourable seasons, was still very excellent, and added greatly to the effect of their display; the Berkshire Prize yellow globes were large and good, and the Mammoth long reds could not be surpassed by anything grown this season. Amongst the numerous exhibits were some roots taken from Mr. Champion's collection which attracted so much attention at Reading, and which were taken from very heavy crops grown on the Reading Sewage Farm. Their kohlrabi was particularly fine and good, as were their varieties of common turnips. The quality of the swedes was very noticeable. Their collection of grasses was interesting and practically useful. The principal contributors to the stand were Her Majesty the Queen, his Royal Highness the Prince of Wales, the Duke of Northumberland, the Duke of Portland, the Marquis of Ailesbury, the Marquis of Donegal, Earl Bathurst, the Earl of Craven, the Earl of Northbrook, the Earl of Redesdale, the Earl of Warwick, the Countess of Yarborough, Lord Calthorpe, Lord Camoys, Lord Chesham, Lord Eversley, Lord F. Kerr, Lord Moreton, W. H. Smith, M.P., Sir W. Heathcote, Bart., Mrs. Hay, Sir S. Dyer, Bart., Sir Gilbert East, Bart., Sir C. W. Lampson, Bart., Sir P. Hunter, Bart., Sir P. Rose, Bart., Sir C. Russell, Bart., M.P., Sir R. F. Sutton, Bart., Sir F. Smythe, Bart., Col. Loyd Lindsay, V.C., M.P., J. Walter, M.P., C. R. M. Talbot, M.P., Major General F. Spence, C.B., Col. Freemantle, Col. Gray, Colonel Lane, Major Allfrey, Major Baskerville, Major Thoyts, Captain Cobham, Captain R. B. Fellowes, Capt. Johnson, Professor J. Buckman, R. B. Blyth, and many other well known agriculturists.

Messrs. Webb and Sons, Wordsley, Stourbridge, had a stand which was worthy of the great and increasing trade done by the firm. Their specimens of Improved Col. North, New Kinver Globe, Yellow Intermediate, and Yellow-fleshed Tankard mangels were very creditable to both seedsmen and growers; their Imperial Swedes have been very successful in New Zealand, growing there to a great size and weight. There were also specimens of their cereals which, in the shape of seed corn constitutes an important feature in their business. Contributors to Messrs. Webb's stand included Her Majesty the Queen, H.R.H. the Prince of Wales, the Duke of Sutherland, the Duke of Portland, Earls Beauchamp, Dartmouth, Northbrook, Powis, Redesdale, Stamford and Warrington, Warwick, Wemyss and March, Lords Bateman, Forester, Hampton, Moreton, Northwick and Willoughby de Broke, Sir C. H. Rous Boughton, Bart., Sir Geo. Chetwode, Bart., Sir Geo. Chetwynd, Bart., Major-General Sir F. Fitzwygram, Bart., Sir F. Smythe, Bart., Sir R. F. Sutton, Bart., Sir W. W. Wynne, Bart., Sir Josiah Mason, Colonel Gunter, Major Cholmondeley, Mr. C. C. Cotes, M.P., Mr. R. N. Phillips, M.P., and others.

Messrs. Harrison and Sons, of Leicester, had also a Stand, displaying a small but good collection of roots grown from their own seeds, including specimens of their

Normanton Globe mangel and Defiance swede.

With this class of exhibits it will be convenient to notice the Stand of Messrs. Dickson and Sons, of Chester, the well-known nurserymen, florists, and seedsmen, on which specimens of plants suitable for lawns, pleasure grounds, plantations, &c., were shown.

#### MANURES AND FEEDING STUFFS.

Messrs. Morris and Griffin, of Wolverhampton, showed samples of artificial manures, and specimens of roots and cereals grown therewith, from the farms of the Earl of Galloway, Sir F. Smythe, Sir R. F. Sutton, Mr. W. O. Foster, Mr. Patterson, Mr. B. Wilson, and others. Their customers, with the aid of roots grown with their manures, have succeeded in taking the following prizes in the show: 4 silver cups, 3 first prizes, 6 second prizes, and 7 commendations.

Messrs. Procter and Rylands, of Birmingham, who contributed many of the extra prize money in the root classes, also showed samples of artificial manures specially prepared to suit various crops, and specimens of cereals and roots which had been grown by their aid, some of which were very excellent.

Messrs. Gibbs and Co., Mark Lane, London, showed their pure feeding cake, which is well known to most agriculturists as a feeding-stuff of great purity and practical value. The munificence of this firm in offering a cup of the value of one hundred guineas contributed very greatly to the success of the show. It is a very handsome two handled goblet, and was won (as stated in report of the live stock) by Lord Lyval, with a cross-bred Scotch bullock, weighing 25cwt. 0qrs. 16lb.—undoubtedly the best as well as the heaviest animal in the show. This firm also contributed a fifty-guinea piece of plate for the best pen of sheep, which was won by Lord Walsingham's Southdowns.

Messrs. Beach, of Dudley, showed samples of their farinaceous food for cattle, sheep, and pigs; Messrs. Ayres, Chambers, and Ayer, of Hull, exhibited their well-known round "Waterloo" cakes; Messrs. Hope and Sons, of London, had samples of their cattle-food, condiments, and spice; Messrs. Spratt, of Bermuda, London, their dog and poultry biscuits; Mr. G. Clarke, of Limehouse, London, their granulated meat, and "Buffalo" biscuits, &c.; Mr. J. Miller, of Tewkesbury, his cattle food and artificial manures; Messrs. Tipper and Son, of Birmingham, their game and dog cakes and "round" oilcakes; Mr. John Eagles, of Bath, his "Champion" cattle cake; Messrs. Barr and Co., Liverpool, their various and excellent feeding-stuffs; and last, but not least, the well-known name of Mr. Joseph Thorley, of London, appeared over a stand in which his famous "cattle food" was offered to the public notice. It would be difficult to find a locality in the country to which the name of Thorley has not penetrated.

#### MACHINERY AND IMPLEMENTS.

Messrs. Samuelson and Co., Banbury, had on view their "Gem" grass mowing machine, their "Handy" manual delivery reaper, and various root pulpers and cutters. Messrs. Bental and Co., Malden, showed their root pulpers, turnip cutters, chaff cutters, and oilcake mills. The Albion Iron Works Co., Rugeley, an assortment of grist mills, corn mills, chaff cutters, with bagging and blowing apparatus, self-acting horse rake, horse gear, &c. Messrs. Waite, Burnell, Huggings, and Co., exhibited a McCormick patent harvester, and self-binder, and as far as the limited space would allow, the action of this highly interesting machine was demonstrated. Messrs. Handyside, Andrew, and Co., Dorby, showed their reapers and mowers; Messrs. Hill and Smith, Brierly Hill, their root pulpers and fencing; Messrs. Underhill, of Newport,

their double plough and cultivator, and vertical engines; Messrs. Tangyle Brothers, Birmingham, their horizontal engine, "Sole" engine, &c.; Messrs. C. Powis and Co., London, their very excellent new combined circular and band sawing machines, and their hand-power machines on the same principle; and Messrs. Turner, of Ipswich, had an assortment of kibblers and corn crushers. Messrs. Clayton and Shuttleworth, of Lincoln, exhibited their well-known portable steam engine, and also their combined thrashing and finishing machine, which cannot be surpassed, for practical utility and for strength of workmanship. Messrs. Barford Perkins, of Peterborough, had a novelty in the shape of a cultivator, which is so constructed as to adapt itself to the uneven strain of the rope; they also showed their usual steam-cultivating apparatus, grinding mills, &c. The Bristol Iron Works Co. had a display, consisting of carts, a float, and a Wheaton's seed distributors; the horse power distributor intended to sow artificial manures as well as seeds and grain, is an implement which will likely come into very general use. Messrs. S. Corbett and Son, of Wellington, showed their potato-digging plough, mills, and pulpers, &c., &c.; Messrs. Corbett and Peele, of Shrewsbury, their turnip cutters, horse hoes, seed barrow, and many other implements; Messrs. J. Elwell, of Birmingham, their portable cattle cribs, troughs, hurdles on wheels, &c., &c.; Messrs. Baylis, Jones, and Baylis, of Wolverhampton, their sheep and cattle hurdles and fencing; Mr. Handley, of Birmingham, his French millstones, &c., &c.; Messrs. Harrison, McGrogger and Co., Manchester, their pulpers, chaff cutters, reapers and mowers; Messrs. Barrows and Stewart, of Banbury, their portable and vertical engines; Messrs. Ruston, Procter, and Co., Lincoln, portable and vertical engines, and circular saw; The Atlas Engine Co., Birmingham, their horizontal and vertical engines; Messrs. Ransome, Sims, and Head, their portable engine and "A 1" finishing, thrashing machine; Messrs. Marshall and Sons, Gainsborough, their portable steam engine and "A 2" finishing thrashing machine; Messrs. Horasby and Sons, Grantham, their portable engine, and combined thrashing and finishing machine, together with mowers, reapers, ploughs, turnip cutters, &c.; the Malden Iron Works Co., Malden, their pulpers, mills, crushers, chaff cutters, &c.; Messrs. Robey and Co., Lincoln, their sixteen-horse-power (nominal) double-cylinder patent Roby "Electric Light" fixed engine and locomotive boiler combined, in motion, fitted with a pair of steam jacketed cylinders, improved feed-water heater and tank, foundation plate, and patent high-speed governors, for ensuring regularity and uniformity in working; Messrs. Pickin, of Birmingham, chaff cutters, mills, &c., &c.; Messrs. Perkins and Sons, Lichfield, their double and single furrow ploughs; Messrs. Woods, Cocksedge, and Co., Stowmarket, their horse gears, mills, pulpers, and a two-horse steam engine; Messrs. Ilmsted and Co., Grantham, show a very excellent vertical engine, which is strong, and adapted for all kinds of work; and Messrs. Richmond and Chandler, of Salford, their "Royal" chaff cutters, pulpers, slicers, corn crushers, &c., &c.

Amongst the miscellaneous exhibits we noticed the stands of Messrs. Day, Son and Hewitt, London, with an assortment of their cattle medicines; Messrs. Lawrence and Co., London, showed refrigerators; Messrs. F. and C. Handcock, of Dudley, butter-washing machines; Messrs. Daw and Sons, of Crewe, their "Driffild oils" &c. Messrs. Binney and Son, Birmingham, their patent packing for steam engines, which is of well-known quality; and lastly, the cup given by Messrs. J. Gibbs and Co., for the best beast in the yard. Every foot of available space in both ground floor and galleries was fully occupied.



## LIST OF PRIZES.

## CORN.

Talavera wheat.—Prize, J. Hopkins, Chaceley, near Tewkesbury.

White wheat.—First prize, Sir G. A. Clayton East, Hall Place Farm, near Maidenhead; second, R. Fowler, Broughton F. m., near Aylesbury.

Red wheat.—First prize, J. G. Antroix, Stretton, near Buntingford; second, J. W. Gifford, Towersey Manor, Bucks.

Barley.—First prize, J. J. Malden, Hill Farm, near Biggleswade; second, E. Lythall, Radford Hall, Leamington.

White oats.—First prize, J. Grestorex; second, L. Cotterell, Hushcombe, near Twyford, Berks.

Black oats.—First and second prize, N. P. S. Ilgou, Adderbury, Oxon.

Beans.—First prize, W. H. Toomer, Grove Hall, Twyford; second, L. Cotterell.

White peas.—First prize, J. Hopkins; second, J. J. Malden.

Blue or grey peas.—Prize, Sir G. A. Clayton East.

## ROOTS.

Collection of Long Globe mangel and swedes.—Prize, value 6 guineas (given by Messrs. Proctor and Ryland, Birmingham), R. B. Blith, Woolthampton, near Reading.

Swede turnips and Globe mangels.—Silver cup, value 6 guineas (given by Messrs. Morris and Griffin, Wolverhampton), G. and J. Perry, Acton Pigott, Conover, Salop.

Collection of Mammoth Globe and Golden Tankard mangels.—Silver cup, value 5 guineas (given by Messrs. Sutton and Sons, Reading), W. W. Champion, Manor Farm, Whitley, Reading.

Collection of Imperial Hardy swedes Mammoth and Prize Yellow Globe and Champion Intermediate mangels.—Cup, value 5 guineas (given by Messrs. J. Carter and Co., London), J. Cave, Pinefield Farm, Rickmansworth.

Kohl-Rabi.—First prize, G. and J. Perry; second, J. Hutt, Thrupp Farm, Kidlington, Oxon.

Long mangels.—First prize (with 2 guineas added by Messrs. Proctor and Ryland), W. W. Champion; second, the Birmingham Tame and Lea District Drainage Board.

Globe and Intermediate mangels.—First prize (with 1 guinea added by Messrs. Proctor and Ryland), W. W. Champion; second, J. Cave.

Swedes.—Silver cup, value 5 guineas (given by Messrs. Sutton and Sons), G. and J. Perry.

Imperial swedes.—Silver cup, value 5 guineas (given by Messrs. Webb and Sons), G. and J. Perry.

Swedes of any variety.—First prize (with 2 guineas added by Messrs. Proctor and Ryland), G. and J. Perry; second, Thomas Wardley, Hatton, Market Drayton.

Common turnips, white flesh.—First prize, Jos. Hutt, Kidlington, Oxon; second, Thomas Penn, Worminghall, Oxon.

Common turnips, yellow flesh.—First and second prize, T. L. M. Cartwright, Ladybank, Fife.

Carrots, with Belgian.—First and second prizes, U. Grist Westbury, Wilts.

Carrots, of any other variety.—First prize, E. Pease, Greencroft West, Darlington; second, W. Kerr, Dargavel Farm, Dumfries.

Ox cabbage.—First and second prizes, S. Robinson, Derby Road, Melbourne, near Derby.

## POTATOES.

Twelve varieties.—First prize (also silver cup, value 5 guineas, given by Messrs. Sutton and Sons; and silver medal, value 2 guineas, given by Mr. Otley, Spencer Street, Birmingham, for best dish in the show), Peter McKinlay, Beckenham; second, J. Pink, Sheldwich, Faversham; third, H. W. Woods, Clapstone Park, Mansfield, Notts.

Eight varieties.—First prize, cup, value 5 guineas (given by Messrs. J. Carter and Co.), J. Pink; second, G. and J. Perry; third, W. Finlay, the Gardens, Wroxton Abbey, Banbury.

Six varieties.—First prize, P. McKinlay; second, G. and J. Perry; third, J. Pink.

Four varieties.—First prize, P. McKinlay; second, J. Pink; third, H. W. Woods. The prizes in this class were given by Messrs. T. B. Thomson, High Street, Birmingham.

Eight varieties of new sorts introduced into commerce in

1877 or 1878.—First prize, P. McKinlay; second, J. Pink; third, T. Pickworth, Loughborough. The prizes in this class were given by Messrs. Hooper and Co., Covent Garden Market, London.

Ashtleaf kidney.—First prize, R. Dean, Bedford, Hounslow second, H. W. Woods, Mansfield; third, W. Finlay.

Lapstone kidneys.—First and second prizes, H. W. Woods; third, R. Dean.

Regents or Dalmahoyas.—First prize, R. Dean; second, T. Pickworth, Loughborough; third, W. Kerr, Dumfries.

Victoria.—First prize, T. Pickworth; second, H. W. Woods.

Magnum Bonum.—First prize, R. Dean; second, G. Wier, Woodcote, Warwick.

Vermont Beauty or Brownell's Beauty.—First prize, R. Dean; second, H. W. Woods.

Snowflake, or other white-skinned American variety.—First prize, W. Kerr, Dumfries; second, R. Dean.

Any white-skinned variety not provided for in classes 21 to 27.—First prize, W. Kerr; second, R. Dean.

Any coloured-skinned variety, not provided for in classes 21 to 27.—First prize, P. McKinlay; second, R. Dean.

## HULL AND EAST RIDING FAT STOCK SHOW.

The annual fat stock and poultry show in connection with the Hull and East Riding Society was opened on Dec. 3 at Hull. The show was held in the Rifle Barracks and Grounds, where a temporary building had been erected. This is only the third show of the Society, but such progress has been made that it was found possible on this occasion to offer prizes amounting to over £1,000, this being £300 in advance of last year, and double the amount offered at the first exhibition. In addition to numerous valuable cups three were offered, each of the value of £100, but one of these—the challenge cup—has to be won three times by the same exhibitor before it becomes his property. The entries in the different departments numbered nearly one thousand, thus being considerably in advance of last year. The entries of fat cattle numbered 113, against 95 last year, and the entries of bulls 9, as against 5. Sheep numbered 40, as against 36; and pigs 43, as against 46. In poultry and pigeons there was a large increase.

A finer exhibition of animals than that at Hull has rarely been seen at any fat stock show throughout the country. Gentlemen who visited Birmingham on Monday say that the quality of the animals shown here far surpasses the display at that well known show. Probably the three prizes of plate, valued at £100 each, has led to the success which has marked the show, and the Society is to be congratulated on the result of its enterprise.

## PRIZE LIST.

## CATTLE.

## SHORTHORNS.

Ox, exceeding three years old.—First prize and cup, T. Bond, North Thoresby, Louth; second, The Earl of Ellesmere, Worsley Hall, Manchester; third, Sir J. D. Aisley, Elsham Hall, Brigg.

Ox, not exceeding three years.—First prize, E. Abraham, Barnethley-Wold, Lincolnshire; second, Earl Spencer, Althorpe Park, Northampton; third, Sir W. C. Trevelyan, Wallington, Northumberland.

Cow, any age.—First prize, T. Willis, Carperby, Bedale; second, R. N. Morley, Leadenham, Grantham; third, T. F. Earle, Bolton, Catterick.

Heifer, not exceeding four years.—First prize, J. Bruce, Burnside, Fuchabers, N.B.; second, The Earl of Zetland Ake, Richmond; third, The Earl of Ellesmere.

## CROSS BREEDS AND SCOTCH BREEDS.

Cross-bred ox, exceeding three years.—First prize, Lord Lovat, Beaufort Castle, Inverness; second, J. and W. Martin, New Market, Aberdeen.

Cross-bred ox, not exceeding three years.—First prize, Sir W. C. Trevelyan; second, J. Tait, Critchell, Inverurie.

Cross-bred cow or heifer, any age.—First prize and cup, J. Ewer; second, the Exors. of E. Jordan, Eas burn, Driffeld.  
 Faded ox, cow, or heifer, any age.—First prize, J. J. Colman, Carrow House, Norwich; second, J. Reid, Greystone, Aberdeen; third, W. McCombie, Tillyfour, Aberdeen.  
 Horned Highland ox, cow, or heifer, any age.—First prize, The Duke of Sutherland, Galspie, Sutherland; second, Sir W. C. Trevelyan.

#### HERFORDS, DEVONS, OR ANY OTHER BREED NOT PREVIOUSLY NAMED.

Ox, cow, or heifer, any age.—First and second prizes, T. New, Letton Court, Brampton Briars, Hereford.  
 Two oxen, cows, or heifers, any age, breed, or cross.—First prize, T. Bond; second, J. Boorman, St. Muncance, Pilesbire; third, J. Reid.

#### TENANT FARMERS' CLASSES.

Shorthorn ox, any age.—First prize, W. T. Wells, Withern, Alford; second, J. H. Stephenson, Saneon, Brough; third, T. Bond.

Shorthorn cow or heifer, any age.—First prize, R. Wright, New Heath, Lincoln; second, W. Knapton, Kink, Lowthorpe, Hull; third, J. Mashill, Brandsby, Easingwold.

Ox, cow, or heifer, any age, any other breed or cross.—First prize and challenge cup, P. Dunn, Singlethorne, Hull; second, W. Sadler, Whitkirk, Leeds; third, W. Colby, Tholperry, Easingwold.

Two oxen, cows, or heifers, any age, breed, or cross.—First prize, Messrs. Freshney, South Summercoats, Grimsby; second, W. Wright, Humbleton, Hull.

Dairy cow, any age.—First prize, W. Waddington, Newington, Hull; second, G. Sargent, Hull.

Shorthorn bull, between the age of six and fifteen months.—First prize, J. Rowley, Stubbs Walden, Pontefract; second, W. Linton, Sheriff Hutton, York.

#### SHEEP.

Three Leicester or longwool wethers, under twenty-two months old.—First prize and cup, P. Dunn; second, J. P. Lane, North Ferriby, Hull.

Three South or other Down wethers, under twenty-two months old.—First and second prizes, The Earl of Zetland.

Three wethers, whitefaced or Down cross, under twenty-two months old.—First prize, J. D. Gosland, Widdington Manor, York; second, J. Hornby, Watton Carr, Driffeld.

Single sheep (not a ram) of any breed or cross, any age.—First prize, J. Hornby; second, J. P. Clark.

#### PIGS.

Pig of large breed, any age.—Prize and cup, R. E. Duckering, Netherporpe, Kirtton Lindsey.

Pig of small breed, exceeding twelve months.—First prize, R. E. Duckering; second, T. Nicholson, Lowther Street, York.

Pig of small breed, not exceeding twelve months.—First prize, T. Nicholson; second, T. D. Lickias, Skirlough, Hull.

Pig of middle breed, exceeding twelve months.—First and second prizes, W. H. Ellis, Horderness Road, Hull.

Pig of middle breed, not exceeding twelve months.—First prize, J. Wright, Cottingham; second, R. E. Duckering.

Pig of black or Berkshire breed, any age.—First prize, C. E. Duckering, Whitehoe, Kirtton Lindsey; second, J. Tennison, Hedon Road, Hull.

Three pork pigs, under twenty weeks old.—First prize, C. F. Haines, Manchester Road, Huddersfield; second, R. Wiles, Leonard Street, Hull.—*Leeds Mercury*.

**NO WORK AND GOOD PAY.**—A curious instance was afforded at Woolwich, on Monday, of the practical working of a strike. A wire drawer, named Thomas Bate, was summoned by the Poor Law Guardians for neglecting to support his wife. The accused said he was on strike from Middlesborough, and had been receiving strike pay of £1 a week for the last year and nine months. In answer to the magistrate's suggestion that he would have been better off by working, he exclaimed, in surprise, "What! work for 22s. a week when I could get 24s. for doing nothing!" He was ordered to pay 2s. a week towards the support of his family.—*Echo*.

## THE WEIGHTS AND MEASURES ACT.

A meeting of the members of the Truro Agricultural Exchange was held on Wednesday, Dec. 4, for the purpose of discussing the Weights and Measures Act and the Highway Act. Mr. Jonathan Rashleigh, the president, occupied the chair.

MR. BRANWELL proposed that wheat, barley, and oats should be sold by the imperial measure of eight gallons, that the weights should be such as hitherto obtained in that market. Wheat 60lb., barley 52lb., and oats 33lb. to the bushel.

MR. JOSEPH THOMAS thought the weight for the bushel of oats should be 37lb.

A long discussion followed.

THE CHAIRMAN remarked that his opinion was that they could sell either by weight or measure, provided the proper standard were used. He had prepared the following memorial for their approval or otherwise:—"The agricultural exchange of Truro respectfully recommend to the Board of Trade the adoption of the weight of 100 imperial pounds, to be used after January 1st, 1879, as the only standard weight, with its aliquot part, for selling corn and all other solid agricultural products, excepting the sale of contracts relating to growing corn. They also recommend that the 100 imperial pounds weight should be given the name of 'cental.'"

MR. JOHN MAGOR moved this as an amendment, and Mr. SARA seconded.

The Amendment was put to the meeting, and 25 voted for it, and 24 against.

**SHALL WE KEEP GOATS?**—A correspondent of the *Journal of Forestry* gives the following account of the habits of these animals:—"Adjoining my premises are some young poplar trees, balsams, abies, and black italians, from two to four inches in diameter. They are planted round a neighbour's garden, and into this garden a young half-grown goat was turned for the amusement of his children. It was at first tethered on the grass-plot, but it made such a perpetual wailing cry, like a child in pain when left alone, that in consideration for those within ear-shot it was, towards midsummer, let loose to run about the garden at will. Of course it destroyed everything green within its reach, *except the grass*, when it never seemed to care for. Yet the food of its choice was the bark of trees, and by the end of July it had completely pared all the poplars of three or four inches girth up to about four feet high, that is high as it could reach, standing on its hind legs. Up to that height from the ground it left them as clean and as bare of bark as your office ruler."

**OUT OF CHARACTER.**—Mr. Auber in Herbert and his colleagues are surely badly advised in the selection made by them of locked-out labourers to parade the streets. The intention, I suppose, is to enlist the sympathy of the Londoners. But is that the object best attained by turning loose bodies of apparently well-nourished hearty-looking fellows, the majority with short pipes in their mouths? "We grow the corn, but must not eat the bread," may be a taking, though not very truthful, motto. Still spectators are apt to reply that the money which is abundant enough to buy tobacco might possibly be better employed in the purchase of bread. And surely there are not a few London publicans who, when the labourers assert that they "grow the hops, but must not drink the beer," are in a position to prove that this rule, like all others, has its exceptions.—*World*.

**"THE WRONG MAID, SIR."**—A few days ago a couple residing in the neighbourhood of Bridestowe, Devon, went to the parish church to be married. The bridegroom, instead of taking his intended bride at the church door and accompanying her to the altar, walked thither with the bride's sister, who was one of the bridesmaids. The bride appeared to have thought that her intended husband had changed his mind at the last moment, and she retired into a pew in a very dejected state of mind. The ceremony proceeded, and it was not until the clergyman came to the very important question, "Will thou have this woman to be thy wedded wife?" that the bridegroom was conscious of his mistake. He then looked round the church with astonishment, and exclaimed, "This is the wrong maid, Sir?" The right maid was soon found; the ceremony was again commenced, and the right maid was married to the right man, much to the satisfaction of all parties.

## THE FOREIGN ANIMALS ORDER.

"At the Council Chamber, Whitehall, the 6th day of December, 1878. By the Lords of Her Majesty's Most Honourable Privy Council. Present—Lord President, Marquis of Salisbury, Mr. Secretary Cross, Mr. Chancellor of the Exchequer.

"The Lords and others of Her Majesty's Most Honourable Privy Council, by virtue and in exercise of the powers in them vested under the Contagious Diseases (Animals) Act, 1878, and of every other power enabling them in this behalf, do order, and it is hereby ordered as follows:—

### " Preliminary.

"1. This Order shall take effect from and immediately after the 31st day of December, 1878.

"2. This Order may be cited as the Foreign Animals Order and is divided into parts as follows:—Part 1, Prohibition; Part 2, Foreign Animals Wharves; Part 3, Quarantine; Part 4, Foreign Animals not subject to slaughter; Part 5, General.

"3. This Order extends to Great Britain only.

"4. In this Order, the Act of 1878 means the Contagious Diseases (Animals) Act, 1878. Customs means Her Majesty's Customs. Master includes a person having the charge or command of a vessel. Other terms, unless it is otherwise expressed, have the same meaning as in the Act of 1878.

### " PART I.—PROHIBITION.

"5. Unless and until the Privy Council otherwise order, animals brought from any of the following countries shall not be landed in Great Britain:—The Austrian-Hungarian Empire, the dominions of the King of the Hellenes, the dominions of the King of Italy, the Principality of Montenegro, the Principality of Roumania, the dominions of the Emperor of Russia, and the dominions of the Sultan, including the Provinces of Bosnia and Herzegovina.

### " PART II.—FOREIGN ANIMALS WHARVES.

"6. The following are the ports at which parts have been by special orders of the Privy Council defined as foreign animals wharves:—Gool, Grimsby, Hartlepool, London, Plymouth, and Sunderland.

"7. Animals landed in a foreign animals wharf shall be slaughtered within ten days after the landing thereof, exclusive of the day of landing. The slaughter of the animals may be commenced at any time after the landing thereof with the permission of an Inspector of the Privy Council.

"8. No carcase, fodder, litter, or dung, shall be moved from a foreign animals wharf, except with the permission of an Inspector of the Privy Council. If the Inspector is of opinion that any such carcase or thing as aforesaid may introduce disease, the same shall be destroyed or otherwise dealt with in accordance with instructions from time to time given by the Privy Council.

"9. Dung and manure shall before being moved out of a foreign animals wharf be disinfected to the satisfaction of an Inspector of the Privy Council.

### " PART III.—QUARANTINE.

"10. The following is the only port at which a part has been by special order of the Privy Council defined as a foreign animals quarantine station: Southampton. The foreign animals there landed must be intended for purposes of exhibition, acclimatization, or domestication.

"11. The landing there of foreign animals is subject to the following conditions:—First. The animals must be accompanied by a declaration of the owner or consignee or his agent, to the effect that each animal is intended for one of the above-mentioned purposes (distinguishing the same). Second. The animals when landed are to be detained in the station for such period as the Privy Council in each case according to the circumstances direct. Third. When moved thereout they are to be accompanied by—(a) A certificate of an Inspector of the Privy Council certifying that they are free from disease; (b) A licence of the Inspector specifying the place to which and the person to whom they are to be taken. Fourth. The Inspector is to send a copy of his licence to the local authority for that place. Fifth. They are not to be taken to any other place or person.

"12. Dung and manure shall before being moved out of the station be disinfected to the satisfaction of an Inspector of the Privy Council.

## " PART IV.—FOREIGN ANIMALS NOT SUBJECT TO SLAUGHTER.

"13. Unless and until the Privy Council otherwise order, foreign animals brought from any of the following countries are allowed to be landed without being subject under the Fifth Schedule to the Act of 1878, or under this order, to slaughter or to quarantine:—Her Majesty's possessions in North America, the United States of America, Denmark, Norway, Sweden, Spain, Portugal.

"14. Foreign animals under Part IV. shall not be landed at any place except at a dock, quay, wharf, or other place of landing approved by the Privy Council within one of the ports following:—Bristol, Cardiff, Falmouth, Glasgow, Gool, Granton, Grimsby, Hartlepool, Leith, Liverpool, London, Newcastle-upon-Tyne, Plymouth, Portsmouth, Southampton, Sunderland, and Weymouth.

"15. The landing of foreign animals under Part IV. is subject to the following conditions. First.—That the vessel in which they are imported has not, within three months before taking them on board, had on board any animals exported or carried coastwise from a port or place in any country other than a country before named in this Part or the Channel Islands, or the Isle of Man. Second.—That the vessel has not, since taking on board the animals imported, entered any such port or place. Third.—That the animals imported have not, while on board the vessel, been in contact with any animals exported or carried coastwise from any such port or place. And the animals imported shall not be landed elsewhere than in a foreign animals wharf, unless and until (1) the owner or charterer of the vessel in which they are imported or his agent in Great Britain, has entered into a bond to Her Majesty the Queen, in a sum not exceeding £1,000 with or without a surety or sureties to the satisfaction of the Commissioners of Customs, conditioned for the observance of the foregoing conditions; and (2) the master of the vessel has on each occasion of importation of foreign animals therein satisfied the Commissioners of Customs or their proper officer, by declaration made and signed or otherwise, that none of the animals then imported therein have been exported from such a port or place as in this article mentioned and that the foregoing conditions have been observed in relation to all the animals then imported therein.

"16. Foreign animals under Part IV. shall not be moved from the place of landing or laid adjacent thereto, or be allowed to come in contact, with any other animals until they have been examined by an Inspector of the Privy Council; and according to the result of that inspection the following consequences will ensue:—(1) If the Inspector certifies that all the animals landed from the same vessel are free from disease, they shall thereupon cease to be deemed foreign animals. (2) If the Inspector certifies, with respect to any one or more of the animals landed from the vessel, that it or they is or are affected with disease, all the animals then imported in the vessel shall be dealt with according to the following rules:—

"A. Cattle Plague.—If the disease is cattle-plague, the Inspector is to detain the diseased animal, and all animal brought in the same vessel therewith, and report immediately to the Privy Council.

"B. Pleuro-Pneumonia.—If the disease is pleuro-pneumonia, the Inspector is to cause the diseased cattle and all cattle brought in the same vessel therewith, to be dealt with as follows:—1. The diseased cattle are to be slaughtered at the place of landing; 2. The healthy cattle are to be slaughtered at the place of landing, or, if landed at a port at which there is a foreign animals wharf, the Inspector may permit them to be removed into that wharf for slaughter, but not elsewhere.

"C. Foot-and-Mouth Disease.—If the disease is foot-and-mouth disease, the Inspector is to cause the diseased animal and all cattle, sheep, and swine brought in the same vessel therewith, to be dealt with as follows:—1. The diseased cattle, sheep, and swine are to be slaughtered at the place of landing; 2. The healthy cattle, sheep and swine are to be slaughtered at the place of landing, or, if landed at a port at which there is a foreign animals wharf, the Inspector may permit them to be removed into that wharf for slaughter, but not elsewhere.

"D. Sheep-pox and Sheep-scab.—If the disease is sheep-pox or sheep-scab, the Inspector is to cause the diseased sheep and all sheep brought in the same vessel therewith, to be de-

with as follows:—(1) The diseased sheep are to be slaughtered at the place of landing. (2) The healthy sheep are to be slaughtered at the place of landing, or, if landed at a port at which there is a foreign animals' wharf, the inspector may permit them to be removed into that wharf for slaughter, but not elsewhere.

"17. Foreign animals under Part IV. shall be detained in some lair or other proper place adjacent to the place of landing and shall be inspected by an Inspector of the Privy Council. The detention shall continue for at least 12 hours reckoned from the time of the landing of the last animal of the cargo, whether the whole cargo is landed continuously without intermission at one place, or part thereof is landed at one place and part at another place, or parts thereof are landed at different times at the same place.

"18. If an Inspector of the Privy Council finds disease in any animal of a cargo, every animal in each separate part of the cargo shall be dealt with as if that disease had been found in an animal in each separate part. If he finds more diseases than one among the animals of a cargo, all the animals brought in the same vessel therewith shall be dealt with as follows:—

(1) If one of the diseases is cattle-plague, every animal in each separate part of the cargo is to be dealt with in accordance with rule A of article 16. (2) If the diseases are pleuro-pneumonia and sheep-pox or sheep-scab, the cattle in each separate part of the cargo are to be dealt with in accordance with rule B, and the sheep in each separate part of the cargo are to be dealt with in accordance with rule D of that article. (3) If one of the diseases is foot and-mouth disease (there being no cattle-plague), every animal in each separate part of the cargo is to be dealt with in accordance with rule C of that article.

"19. Where an animal forming part of one cargo of foreign animals under Part IV. has not been kept separate from an animal forming part of another cargo of foreign animals, all the animals forming those two cargoes shall be dealt with as if they formed one cargo.

"20. An Inspector of the Privy Council may detain, for any period that he thinks necessary or proper, any foreign animal under Part IV. which he has reason to suspect is diseased or may introduce disease.

"21. No animal, carcass, fodder, litter, or dung shall be removed from the lair or other place adjacent to the place of landing where foreign animals under Part IV. are detained, except with the permission of an Inspector of the Privy Council. If the inspector is of opinion that any such animal or thing as aforesaid may introduce disease, the same shall be slaughtered, destroyed, or otherwise dealt with in accordance with instructions from time to time given by the Privy Council.

"22. Nothing in Part IV. shall prevent the landing of any foreign animal at a foreign animals' wharf if the owner of the animal or his agent in Great Britain or the consignee thereof so desires.

"CHANNEL ISLANDS.—23. Unless and until the Privy Council otherwise order, animals brought from the Channel Islands shall be subject to the foregoing provisions of Part IV.

"ISLE OF MAN.—24. Unless and until the Privy Council otherwise order, animals brought from the Isle of Man are allowed to be landed without being subject under the 5th schedule to the Act of 1878, or under this Order, to slaughter or to quarantine, or to the foregoing provisions of Part IV.

#### "PART V.—GENERAL.

"25. All foreign animals when landed at a port in Great Britain shall when landed, be placed under the charge of an Inspector of the Privy Council.

"26. All animals for the time being in a foreign animals' wharf, or in a foreign animals quarantine station, or in a place of landing for foreign animals, within Part IV. shall be deemed foreign animals, and the regulations which apply to the wharf, or station, or place of landing shall apply to all those animals.

"27. Where an Inspector of the Privy Council or the person in charge of a foreign animals' wharf, or of a foreign animals' quarantine station, or of a place of landing for foreign animals within Part IV. affixes at or near the entrance thereof a notice to the effect that persons entering that wharf, or station, or place will be required before leaving to disinfect themselves as their clothes, then every person shall on being requested comply with the terms of that notice.

"28. Notwithstanding anything in this Order, where a vessel comes into port having on board foreign animals, maimed or injured on the voyage, the owner, consignee, or other person in charge thereof, or the master of the vessel, shall, if directed by the Inspector of the Privy Council, or may, if he thinks fit slaughter those animals or any of them immediately on their being landed; but the carcass of any such animal is not to be moved from the place of landing, or to a slaughter-house adjacent thereto approved by the Privy Council, without a certificate from the inspector certifying that it is not likely to introduce disease.

"29. Where any regulation relating to foreign animals is in operation, the local authority and all constables and police officers shall assist the inspector of the Privy Council to carry the same into effect and to enforce the same, and shall do or cause to be done all things from time to time necessary for the effectual execution of the same.

"30. If a vessel arriving has on board the carcass of a foreign animal, horse, ass, or mule which was taken on board for the purpose of importation, but has died on the voyage, the master of the vessel shall, immediately on arrival, report the fact to the principal officer of Customs at the port. The carcass shall not be landed or discharged from the vessel without the permission in writing of the principal officer.

"31. Where it appears to the principal officer of Customs with respect to any foreign animal, or any fodder, or other article, brought by sea that disease may be thereby conveyed to animals, he may seize and detain the same, and he shall forthwith report the fact to the Commissioners of Customs, who may give such directions as they think fit, either for the slaughter or destruction, or the further detention thereof, or for the restoration thereof to the owner on such conditions, if any (including payment by the owner of expenses incurred by them in respect of detention thereof), as they think fit.

"C. L. PEEL."

## LIVE STOCK NOTES.

At length a gleam from behind the cloud! Certain it is that there is no demand for any wool bales that the farmer may have nursed in hope. Barley, except of the prime sample, obtains no offer. But the papers of this morning give new and welcome hope; and that, in accordance with, and support of all, I have ever preached in these columns. Next year, the Premier trusts, will see another state of things. Already he thinks the corner has been turned; and moreover, in the more determined energy of America over Europe he sees an opening—he finds grounds for expectation of our country's renewed prosperity. A Welsh paper of this morning, moreover, gives a report of a lecture by that intelligent observer, Mr. Vivian, M.P., who has recently spent some time in study of the resources of America. There is much in his remarks to interest and encourage all classes of the community; but what applies more directly to our line of thought is his statement that in the comparatively "settled" parts of America he was surprised to find lots of forest ground yet unreclaimed, lots of trees yet unfelled—so much the better obviously for the future. A large old pear-grove on my farm I decided to save from the axe, as a reserve fund of fuel in case the supply of coal came seriously to wane—we were so terribly frightened on that score a few years since. Incidentally one gains new courage from Mr. Vivian's assurance that the world must really be an "old one" before, at least, the Transatlantic coal-fields are exhausted. Now that gas has had to draw in its horns before the electric light there is yet better hope for the lasting of the supply. But, to return to the trees: of course when it does come, through the revival of energy and the spread of colonists, this timber is utilised, and the land of its occupation tilled, there will be new demand for stock of all kinds to furnish it with. Cheer up, then, breeder! Thin off, clear off only such as you "must, for cash" reasons, send to market; preserve, nurse the best. Above all things, don't kill the

goose that lays the golden eggs! Do all you can, strain every muscle and nerve to be enabled to reserve for the future the material for reproduction. This distress cannot last much longer. Don't hope to make much of eorn. Straw for litter you must have; and a fair supply of good grain you may secure, by dint of care and outlay, if you are smart at your occupation: but don't look for improved prices. Mr. Vivian informs us that they are meditating a canal from Lake Erie, by help of which the conveyance of grain will be even yet greatly cheapened. This will be a glad fact so far as the feeding of stock is concerned. England, as we boast, is the *breeding station* of the world as far as regards cows, pigs, sheep, and horses. Even though France may claim to rival us in regard to the last, it is to be remembered that they obtained the root from us; and they will be continually coming over for the elements of improvement. Let us do our best, not only to hold our own, but to add to their excellence. There is room in many ways and places for improvement. By selection, by new crosses, by judicious feeding much remains to be done. Some families suffer from an excess of in-breeding, others need its adoption. The various new herd and stud-books that are being compiled will have their eminent use in affording information where to obtain the most carefully-protected strains, the bluest blood. And the breeder then must be a man of method, of thought, and energy. In the coming year there will be many opportunities of securing good animals. Some of the most famous Shorthorn breeders will be selling drafts, notably Lord Fitzhardinge, Colonel Kingscote, Lord Sklmersdale, Rev. P. Graham, &c., &c.; when herds get overfull a thinning must occur; in fact, excellent animals are continually being sold in one corner or another of our island home. There is now the opportunity, too, of trying, as Colonel Gunter bravely shows the way, to recover constitution and milking aptitude in the cow without sacrificing type. The day must come when breeders buy again, as the Collings and men of their day did, animals for their thorough personal excellence as well as for their paper (where reliable) pedigrees. I introduce the words between parentheses, because, unhappily, there are cases in which more than suspicion attaches to given pedigree. Terrible is the temptation to the needy and unprincipled; and there is no protection to the buyer against it, except in the physical character of the animal itself and the reputation of the breeder. I mentioned lately a cubal amongst the local breeders to carry off the prizes at a recent country show, by sorting their respective herds, pairing this cow with that bull, &c., so as to sweep the board and share the spoil. I could not have believed it possible if it had not occurred.

A very successful exhibitor of fowls, and a thoroughly good fellow, replied to me lately, "O yes, I have lent dozens of fowls for other people to show, but they won't let us do that now." He evidently saw no harm in it, and he is a man that any of his acquaintances would trust implicitly. It only shows how elastic is the tie of morality. An excellent judge, remarking to me lately on the pedigrees of some animals sold, said, "They don't look it. I'll have nothing to do with them." There is no doubt that the different families established by various breeders have their own peculiar shape and style which are easily discernible by the initiated. You can distinguish between them as easily as you can between the schools of modern painters. It only requires study, and a love of the art. The only danger of breeding is the "losing good qualities," whether type, aptitude to fatten or milk, size, &c. There is no doubt that Mr. R. Booth, through Mr. R. Colling's Red Rose blood, and Mr. Bates, through Duchess, managed by excessive in-breeding (which has quite attained its limit) to establish types of excellent character, which the bulls of Waraby

and Kirklevington impress upon any cattle with which they are paired. The eye, I insist upon it, in the future, must have its weight in deciding upon the merits of a tribe. It won't do to talk nonsense about "pure T," or "pure C," "pure D;" there is *no such thing*. The expression may be leading-strings for the beginner; but great breeders have never allowed themselves to be fettered in that way.

There have been many losses from sheep "doing too well" on turnips. Many have had to be "stuck," and many have died before the vet. has arrived. Shepherds and farmers seem thunderstruck when the mortality begins. An immediate and certain cure is to dose them with a wineglass of water in which a teaspoonful of citrate of magnesia has been dissolved, twice over at intervals, and oftener if required, and then insist upon the turnips being pulled and clipped some days before they are used. A half-crown bottle of "citrate" does a large number. "Last year," Mr. Vivian informs us, "2,820,840 of these animals (pigs) were slaughtered in Chicago, that was to say, 7,736 per day, or five every minute through the twenty-four hours throughout the year." Terrific, but most interesting calculation! This ought to stimulate the Berkshire men to *new* exertions, their breed being popular in America. The value of a breed evidently depends upon its use, not only *per se*, but in giving a fillip to other breeds. The relative merits of the Hereford and Shorthorn cattle have long since been discussed in the pages of the *Farmers' Magazine*. There is no use reviving the subject. Facts are facts, and seeing that in Herefordshire itself Shorthorn bulls are bought and used on the native cows, what are we to conclude? I might state much more, but as there is excellence in both sorts, let the breeders of each, in their respective vocation, do their best to maintain, if they cannot improve, the one they have adopted for their own. A friend in Queensland tells me that they object to the Hereford cattle, as they get so "wild in the bush you cannot get ride within a mile of them;" who would have expected this of such a civilised breed?

VIGIL, Dec. 7.

**RABBIT TRAPS.**—A lady writes to the *World*:—"I don't know if you know it, but you are extensively read by country gentlemen; and I want you to say a few words to them about the brutality of the traps in use at present for catching hares and rabbits. I dare say you are familiar with the sight of the odious things, so I won't describe them; but I am sure no one can think of what they really are, or in this civilised age they must have been done away with long ago. When I tell you that the other day my cousin and I were on for a walk in a lovely part of these Purbeck Hills, and were frightened dreadfully by loud screams (and you remember I'm not nervous), and when I also tell you that these screams went on for half an hour, and proceeded from a poor little soft-eyed bunny, I am sure you will do something in their cause. The trap is attached to a chain and pegged down, and the poor little things are caught in a vice, that goes through one leg and breaks it while holding it tightly, and they run round and round in their agony, until the gamekeeper takes his evening walk, unless they are happy enough to be seen by some passer-by and kindly knocked on the head. We tried our best to release the rabbit we found but couldn't open the trap; and I am glad to say we unset all we could find, and we found five before we left. But surely, surely some one can invent either a painless way of catching them, or a trap that can kill them as soon as caught. A friend of ours told me that he always takes a stick out with him, simply so that he may be able to finish the misery of the little captives; and he said he had seen a field where the turnip-heads were all knocked off in complete circles where the trapped hares and rabbits had run round and round while in the traps. Do please write a few lines about this."

## THE SMITHFIELD CLUB SHOW.

The 51st exhibition of the Smithfield Club, which came to a close on December 13, has been one of the most successful the Club has ever held, as far as the creditable nature of the Show itself is concerned. With respect to the attendance, there is a discrepancy in the accounts which have appeared, and the official statement which we expected, has not yet arrived. The arrangements of the Show were excellent, in spite of the absence of the Assistant Secretary (Mr. Pullen). Sir Brandreth Gibbs has been busy with the affairs of the Club since September, and by his exertions he has been able to make up for Mr. Pullen's absence. During the Show week the firm, of which he is the head (Messrs. Thomas Gibbs and Co., of Piccadilly), placed their staff at his disposal, and were on that account obliged to give up their usual exhibition of roots, &c. A considerable number of the fat stock were sold at fair prices, but a good many remained for sale at the Christmas market.

The numbers of animals shown in the different cattle classes were as follow:—Devons, 29; Herefords, 22; Shorthorns, 39; Sussex, 30; Norfolk and Suffolk Polled 4; Scotch, 18; Welsh, 3; Cross-bred, 32. Of sheep there are, Leicesters, 9 pens; Cotswolds, 9; Lincolns 8; Kent, 7; Southdowns, 33; Hampshire and Wiltshire Downs, 24; Shropshire Downs, 18; Oxfordshire Downs, 11; Cheviots, 5; Mountain breeds, 10; Ryeland and Dorset, 7; Cross-bred, 16. Of pigs there were 63 entries. Thus, the totals present are Cattle 177, Sheep 156, Pigs 63. The entries, which should be given to compare with those of previous shows are stated in the following table, it will be seen that there were only five absentees:—

	1870	1871	1872	1873	1874	1875	1876	1877	1878
Devons .....	33	44	37	46	33	31	45	30	29
Herefords...	43	30	27	33	23	22	33	21	23
Shorthorns..	45	41	47	65	32	33	53	32	41
Sussex .....	26	28	21	33	32	27	39	31	30
Scots & other breeds ...	29	26	24	16	54	72	74	59	59
Sheep .....	182	149	167	188	177	161	153	172	156
Pigs .....	55	66	54	49	47	40	61	52	63
Total entry..	474	443	427	486	398	392	455	391	401

Coming to details, there is much to be said in praise of the show, for the quality was good, and the general average of the horned stock was more practically useful than we have ever seen in a fat stock show. There were very few overdone animals, and fewer still that had run into age, waste, and unsightliness; the finish of most of the stock was good—much better than last year—and in certain divisions of the show the general improvement, and progression toward practical utility was very marked indeed. In some divisions the merit was not of a high order, and, as we remarked last week, there was no star of great magnitude to be found in the Hall; but the animals in the great majority of instances had been well

bred and well-fed, were useful if not gaudy, and whilst there was only here and there a first-rate show animal to be found, the butchers showed their judgment by buying up quickly many good bullocks, which the Smithfield Club judges had been obliged to pass over entirely. Nevertheless, whilst paying our cheerful tribute to the real worth of the show, we cannot say that the first-prize standard, if we may be allowed such an expression, was a very high one. When the musters were made for the champion prizes, the class-prize winners were not a very grand lot of show animals; but this is not the standpoint from which we judge of the real merit and usefulness of the Show. We were far more gratified to see the general average good, and practically useful, than to have spent the greater portion of our time in admiration of some one or two animals greatly out of the common. It would have added considerably to the interest of the Show if the competition had been open to the animals from Bingley Hall, and we should particularly have liked to see Lord Lovatt's cross-bred, the Rev. Bruce Kennard's Shorthorn, and Mr. McCombie's polled Scot, at Islington. However, in spite of the absence of the best Birmingham animals, and notwithstanding two weak divisions, the cattle at Islington were greatly to our mind; and we trust another year to see a still greater improvement worked out on the same lines.

The Devons were put first on the catalogue, as is the usual plan at Islington. These, as a whole, we considered a very useful lot of cattle containing some excellent butchers' beasts. The quality could not be grumbled at, but the character of many of them was not of the South Devon or "South Ham," type, than that of North Devon. We fail to see any improvement in the Devon classes; they appear to remain at about a dead level. Possibly the breed may be going back a little, as it is difficult to maintain a stationary position in any competitive struggle; at any rate, the Devon classes were no better than they were at Islington last year. The younger class of Steers was not a very good one; Mr. Senior's first prize animal was firm under the hand and had a well-covered back, but he was not really good at either end, and the second prize animal belonging to the same exhibitor was nothing out of the way. Both these Steers were bred by Lord Portman.

The Prince of Wales obtained a commendation for a good handling little bullock bred by Mr. Stranger; but it was noticeable that none of the prize winners in this class were bred by the exhibitors. The next class, for Steers not exceeding three years and six months old, was certainly a better one, but yet not a good one. Mr. Overman's bullock, which took the first prize in the class, and also the Breed Cup as the best Devon in all the classes, was very fat, and rather a soft handler, bare on his shoulders, and plain in his rounds, but he had a good back and loin, and an excellent flank. The Prince of Wales's second

prize beast was rather flat-ribbed, and had a plain rump; it was bred by Mr. Stranger. Her Majesty the Queen showed a plain bullock—as usual. In the class for older oxen, Mr. W. Smith's first prize beast, bred by himself, is a very useful butchers' animal, rather uneven, and not a first rate animal. There was not much to choose between him and Major Buller's second; both are useful, and neither very ornamental. It will be seen that both the Prince of Wales and Major Buller win with Mr. R. Stranger's blood; and the cup animal, exhibited by Mr. Overman, as well as a third prize older bullock, were bred by Mrs. Clark, from the stock of the Earl of Leicester. The three heifers exhibited obtained the first, second, and third prizes. Mr. Walter's was full of flesh, but a poor first; Mr. Smith's second was flat-sided, and of no thickness even for a Devon; and Mr. Overman's third, was a deep barrelled, short-legged, useful animal which might as well have been placed higher. The cows were perhaps a trifle better, Mrs. Langdon's being very fat along the back, and Mr. Walter's a fairly good Devon. This division of the Show did not contain anything very good or particularly bad, and very few of the winners were bred by the exhibitors.

Herefords certainly disappointed us. There was nothing as good as was Mr. Platt's champion Hereford ox at Birmingham. The winner of the cup as the best Hereford was an ox bred by Mr. J. U. Farmer, and exhibited by Mr. R. Wortley. He was over four years old, with good loin and back, and a deep animal; but he was of no great scale nor thickness, and was rather plain on his rump. Considering what an Hereford ox ought to be, and often is, at our great shows, this was a poor champion. The only other ox over four years was a very plain one exhibited by the Earl of Darnley. The class for steers not exceeding three years and six months old was a fairly good one, containing some useful animals. It will be seen that there is an advantage of three months in this class over the corresponding one of last year, and it will be remembered that there was only one entry in it then, whereas, this year there were six entries. This is an improvement, as the class is the most important of all. Last year there were six entries in the class for oxen above four years old, and this year only two; this, too, is a change in the right direction. As we remarked at the time, there can be no advantage to either breeder, feeder, or consumer in keeping animals a year after they are ripe to feed them into waste and deformity, and we say again, that there is no necessity for the aged class of bullocks in any of the pure breeds, excepting, perhaps, the Highland Scots. The first-prize Hereford in this class was exhibited by the Earl of Powis, and bred by Mr. J. Price, of Penrith. This animal was first in the next younger class last year, and has greatly improved. He is now well finished and handles to perfection. His chine, back, and loin are excellent, but he falls off in his hind quarters. He is in some respects better than Mr. Wortley's champion, but rightly placed below him on the whole. Both are good Here-

fords, but neither of them belong to the very front rank. Mr. Wortley's ox weighed 2) cwt. 3 qrs. 10 lb., and the Earl of Powis's steer 17 cwt. 2 qrs. 1 lb., live weight. Mr. Lewis Lloyd's second-prize animal was a particularly useful bullock, rather plain in front of his shoulders, but having good back, ribs, and rounds; he was not by any means to be despised. Another beast of the same kind of merit was Mr. Groves', bred by Mr. T. L. Meire. Altogether these bullocks were a very creditable lot, and the class is one which requires to be encouraged in all the divisions. Those who intend an animal for this competition are beginning to see that it must not be overdone in the next younger stage, and that may be the reason why the younger steers are not so well finished, or rather not finished at all. Thus the Earl of Powis showed a promising animal, bred by Mr. J. Price, in the class for steers not exceeding two years and six months old; he stands rather high, but is of nice quality, and may come out well another year, and obtained second prize. Mr. Wortley was to the front with one of Mr. P. Turner's breeding, which was very fat, but rather plain and narrow behind. Mr. Lewis Lloyd's steer is a very promising beast, and the one shown by Mr. J. Morris was also a fairly good one. Mr. Justine's steer is of a very taking style, and may be heard of again. There were only two cows and two heifers in this division, and one cow and one heifer worth showing. These were a very nice quality heifer, low, deep, and square, bred and exhibited by Mr. James, of Mappowder, Dorset, and Mr. C. Williams's cow, bred by Mr. S. Yeld, of Leominster; both of these were excellent animals and fairly good show Herefords. It cannot be said that the white faces looked very well as a whole, or that they improved at all in detail. They have not improved as a division either at Islington or at Birmingham the last two years; and this is greatly to be regretted, as the stock in breeders' hands was probably never better than now, and the breed itself is as popular as ever amongst those who know how to keep it in its proper place. We should be sorry to think that Hereford breeders and feeders were losing interest in public competitions; and yet we scarcely know how else to account for the facts.

The Shorthorns were better, as a whole, than we have seen them before in a fat stock show. Last year we did not hesitate to call them a "mixed" lot, and a very mixed lot they were; this year they are the best division in the show. We do not say that all the Shorthorns were good, but we say that the classes were all good, and amongst all the exhibits there was not one really bad, or very indifferent. The animals were less uneven than usual, less patchy, and, as a rule, far better butchers' beasts. Great gobs of fat were not common, and to the best of our knowledge there was not a very unsightly animal in the whole lot. There was more beef than tallow, and we are happy to chronicle the event, giving honour where it is due with greater pleasure than censure where that is due. The Champion beast of the Show was a Shorthorn heifer

(Icicle), 3 years 10 months 2 weeks old, bred and exhibited by Mr. B. Stratton, The Duffryn, Newport, Monmouthshire. Her live weight was 18 cwt. 3 qrs. 8 lb., and her girth was about 9 feet. The prizes won by this heifer were the 100-guineas Champion Plate for the best beast in the Show, the £50 silver cup for the best heifer or cow in the pure-bred classes, the £40 silver cup for the best Shorthorn, and the first prize of £20 for the best heifer in class 14. We do not consider this heifer as good a Shorthorn as the Rev. Bruce Kennard's Iole at Bingley Hall, which weighed over one cwt. more, and was of better style and character; but still she was undoubtedly a first-rate animal, very level and evenly fed, and as round as a barrel. The quality was undeniable, the bone small, no patches and excrescences of fat, and the animal itself built on a small scale, with nothing coarse about her. She won fairly enough. The second prize heifer was bred and exhibited by Mr. J. J. Ratcliff, and is a Shorthorn of great merit, which may be heard of again. Mr. Slucomb's third prize animal was another real good one, with excellent chine, back, and rounds short on the legs, and of great thickness. Sir John Sainburce's heifer—highly commended—had a faulty ramp, and scarcely deserved to be placed before the capital heifer exhibited by the Administrator of the late Mr. T. Simmonds. Altogether this was an excellent class, very creditable both to breeders and feeders. Shorthorn cows are often one of the worst classes in the Show, but that cannot be said of them this year. They were not as good as the heifers, but were a far more level lot than usual. Amongst them was the well-known Blooming Bride from the Stand Stud Company, which obtained a commendation only. That in itself speaks well for the cows. Amongst the oxen, of which there were five entries, was Mr. S. Bull's beast which obtained the £50 cup as the best ox or steer in the pure-bred classes, and, of course, the first prize in the class as well. He had a struggle with Mr. Wortley's Hereford to obtain the former award, but he was honestly the better beast, although there is room for fault-finding. He is a massive beast, weighing 22 cwt. 2 qrs. 15 lb., very thick through the heart, and full of firm flesh; but he is not a very first rate show animal, being somewhat plain on his rump, flat in the outside flank, and small in the twist for a beast of his scale. Sir R. Musgrave's second-prize ox was also a good one, and Mr. J. Mackessack's third-prize bullock was a square made, wealthy Shorthorn, full of good quality beef. The Kentucky bullock was coarse. The Shorthorn steers not exceeding three years and six months old were a strong and good class of ten entries, against only one entry in the corresponding class last year. This again is highly satisfactory. The first prize winner, exhibited by Mr. J. J. Coleman, and bred by Mr. F. Hubbard, was a fairly good Shorthorn, nothing out of the way, but not one of the front rank. His live weight was 18 cwt. and 23 lb., and the quality of his meat was good. The second and third prizes went to Mr. D. McIntosh for bullocks of his own breeding, both of good quality and

very creditable. The whole of the class were much better Shorthorn bullocks than one usually sees. The younger steers bore examination well, and amongst them were some promising animals, such as Mr. C. W. Schroeter's stylish little steer, short, but well fed and a good handler; Mr. J. Stratton's steer was bare in places, but of good quality, and the third-prize steer, bred and exhibited by Colonel Lloyd Lindsay, was a white bullock of good scale and not at all coarse. Mr. Green's commended steer was of nice quality, but not made out. This class again was very creditable; in fact, the Shorthorns won fairly enough this time.

The Sussex Cattle were again in strong force, and formed a very interesting division of the Show. There can be no doubt that the Sussex breeders are paying great attention to their stock, and the improvement year by year is very noticeable. To the butchers they are probably of more interest than the smaller and finer Devons, and evidently the breed is progressing instead of standing still. A lot of very excellent beef stood in the Sussex row at the Agricultural Hall. The younger steers were not a very showy class; Mr. Coote's first-prize bullock was of nice quality and had a well-covered back; but his quarters were light and he was rather narrow. Mr. Stafford's was not so stylish, but his quarters were better. The nine entries in the next older class contained some good and very useful bullocks. Mr. Agate's was full of flesh and weighed 20 cwt. 0 qrs. 18 lb.; Mr. Coote's second-prize beast was short but deep, well furnished over the loin and a good handler; and Mr. Child's bullock was a capital butcher's beast. The oxen were very big; one, bred and exhibited by Messrs. J. and A. Heasman was the heaviest beast in the Show and obtained a commendation from the judges. Mr. J. and C. Lee obtained first prize for another very heavy animal weighing 22 cwt., and all four animals in the class were full of flesh and of great weight. The rump seems to be a defective point with Sussex cattle, and they are often bare on and in front of the shoulders. This was a fault in Mr. J. Woodruff's heifer, bred by Mr. J. Kirkpatrick, but she was one of the best females in the Show, and possibly the best Sussex beast which has been seen in a show. She took the first prize and the £40 cup, for the best animal in the Sussex division, and her entire middle was first-rate. Mr. Wood's heifer, placed second, was short and thickset, made like a Shorthorn. Mr. Stamford showed a very nice small ripe heifer. The class was a good one. The three cows all obtained prizes. Messrs. J. and A. Heasman being first with a good animal, Mr. Neame's cow was level and well ribbed, but Mr. Campion's had no great merit. The Sussex cattle, as a whole, were highly creditable. There were three entries of Norfolk polled cattle standing next the Sussex, only one of which was at all a good one, and that one not much to speak of.

The Scotch breeds were quite a disappointment. The Highlanders last year added greatly to the tone of the Show, and were a source of great attraction; this year



however, there was nothing which could at all compare with Sir W. Gordon Cumming's magnificent animal, or even with either of the prize takers of 1877. The Prince of Wales exhibited a good Highlander, no doubt, and like all good Highlanders he was full of the best possible beef, but he was nothing after last year's performance. Of the other two oxen it is not necessary to speak. The heifers, too, were not particularly good, and Sir W. C. Trevelyan's second prize animal was particoloured, and had upright horns like an Ayrshire—looked altogether like a cross-bred. The Polled Scots were another weak division. Sir W. Gordon Cumming's first prize winner, taking also the £40 Cup for the best animal in the Scotch classes, was not a first-rate Scot; he was uneven, and had little in front of him compared with what a Polled Scot usually has, and his hind-quarters were rather narrow. Mr. McCombie did not send one equal to the usual excellence of his exhibits; the ox, which took second prize, was narrow along the top and had badly-sprung ribs. His net weight was 20 cwt. 2 qrs. 14 lb., being 77 lb. lighter than the one he sent to Birmingham, and nothing like as good a beast. The polled heifers or cows were poorer still. Mr. Stevenson's first prize heifer was a very indifferent show beast, but had some good beef about her. Mr. Adamson's heifer was still more moderate, hollow-backed and small through the heart. There was one first-rate Scotch polled heifer, but she stood in another place and will be noticed further on. We could not help thinking with regret of the beautiful heifer exhibited last year by Sir W. Gordon Cumming, which with his Highland ox, formed, to our mind, the best male and female beasts in the show, although they were not so placed. Bearing these circumstances in mind, and considering, too, that the Scotch classes were better this year at Bingley Hall, we were not a little disappointed. There were three very big Welsh Runts, one of which weighed 21 cwt. 3 qrs. 3 lb.

The Cross or Mixed-bred cattle formed a good division, and the great majority of the animals were very useful, indeed; the average merit was such as could not be complained of, yet there were no extraordinarily good animals amongst them. These crosses, usually between a Shorthorn sire and a Polled Scotch dam, are usually the best butcher's beasts in any show, and so they are this time at Bingley; but there was nothing amongst them as good as Lord Lovat's cross-bred at Bingley Hall, nor anything approaching it. Amongst the steers, the Marquis of Exeter showed a cross between Telemachus 6th and a Highland cow, which had the hair, hide, and colour of the Scot and the form of the Shorthorn; he was not noticed nor did he call for it. The oxen were of course a good lot. Mr. G. Shand's ox won the first prize and the £40 cup as the best Cross-bred; this was a remote cross with Shorthorn blood on the side of the dam—not a very usual form of crossing, and his weight was 21 cwt. 1 qr. 5 lb.; he was not very level, but was covered with good meat, had excellent rounds, rump, wide quarters, and was a firm handler. Lord Lovat's

second prize weighed 11 lb. more, and must have pushed the last-mentioned very hard indeed; his hind quarters were not as good, but he was perhaps better in some few points. Both had prominent shoulders, and both were uneven, but both were capital butcher's animals, Messrs. J. and W. Martin showed a very square made, heavy beast; Mr. Bruce's ox was very fat, but his chine, back, and loins were excellent; Mr. R. H. Harris and Major Thompson both had good animals; and Messrs. Bell and Sons, of Glasgow, had an American ox, bred in Kentucky from a Shorthorn sire and a "native" cow, which had his manger filled with corn cobs to show us how he had been brought up. The whole class was very rightly commended by the judges. The heifers, too, were good. Messrs. Martin's Shorthorn and Aberdeen cross was small boned and very thick; Lord Lovat's second prize heifer was from a Shorthorn bull and cross-bred Scotch cow, weighing 19 cwt. 0 qrs. 26 lbs., very massive, but rather flat-sided; and Mr. J. O. Stephenson's heifer was a very pretty, small, compact animal of excellent quality—a cross between a Shorthorn bull and an Irish Kyles. Amongst the steers, oxen, cows, and heifers not qualified to compete in any of the foregoing classes, were to be found two big oxen of no particular merit: two Danish cattle which would have been more in their place at the cattle market than at the Cattle Show, and perhaps safer at Deptford than at either place; two or three uneven Shorthorns, amongst them Baroness Pawlett from the Prinknash herd; one Shorthorn of considerable merit bred and exhibited by Mr. J. G. Wilson, which took second prize; and a first-rate polled Scotch heifer exhibited by Messrs. J. and W. Martin. She has deteriorated since she was shown by Sir W. Gordon Cumming last year, but she was a long way before anything in the Scotch classes this year. It is not a little singular that such animals as this Scot—bred by Mr. A. Paterson—and the Rev. Bruce Kennard's Shorthorn at Bingley Hall should have appeared, one at each show, in a position which debarred them from taking honours due to breed. But as they had not bred a calf they were ineligible for the cow class, and they were too old for the heifer class; consequently becoming extra stock.

This Scotch heifer was long, and had excellent chine, back, ribs, loin, and her shoulders were covered to perfection, giving her the appearance of having no neck. Her meat was beautiful, and she was covered with it; but her rump was a little narrow, and her twist small, giving her the appearance of standing close behind and immensely wide in front, as the thickness of her forehead was extraordinary; and she was not perfectly level. But for these defects she would probably have taken the Champion Plate of 100 guineas as best beast in the Show, for which she held the reserve number.

In closing our notice of the cattle classes we can but remark that the Scotch and Hereford exhibitors did not send their plums to London this year, as was talked about in Bingley Hall; and that there was less distance between

the first prize animals and the rest of the Show at Islington than we have ever seen before—which we take to mean well for the future.

The heaviest beast at Islington was Messrs. J. and A. Heasman's Sussex ox, which weighed 23 cwt. 2 qrs. 3lb.; and the heaviest at Bingley Hall was Mr. R. Wright's Shorthorn ox which weighed 26 cwt. 1 qr. 7 lb.

### SHEEP.

The show of Leicesters, numbering nine entries all in their places, was a fairly good one, but Mr. Painter's first prize wethers, which took the breed cup, were not particularly good handlers. The one entry of lambs belonged to the same exhibitor. The Cotswolds were a small but good division, Mr. Smith winning with wethers, which took the cup as well, and Mr. Swanwick with ewes; there was no entry of lambs, and Mr. J. Gillett was this time quite out of the hunt. The few Lincolns were excellent. Mr. Lister's wethers defeated those of Mr. Pears and Mr. Sell, but Mr. Sell's ewes took the breed cup, the pen of three sheep weighing 9 cwt. 0 qrs. 11 lb., one pound heavier than Mr. Pear's pen. Mr. Sell also took first and second prizes with lambs which were highly creditable. The five pens of Kentish sheep were headed by Mr. Page, and they were all of them very useful sheep. There were also two pens of lambs shown against Mr. H. Farthing's Dorset lambs which took the prize over their heads; Mr. H. Farthing also showed two pens of Dorset wethers and two pens of Dorset ewes, which were awarded first and second prizes in each case, being very excellent sheep. There were a few good Cheviots, and a rather strong entry of Mountain sheep, the Duke of Roxburghe's having extraordinary fleeces. The Cross-bred sheep were a very useful lot indeed, the whole of the thirteen entries being of considerable merit. The first prize pen exhibited by Mr. W. Robinson were by a Hampshire Down ram, out of Leicester and Lincoln cross-bred ewes; they were only 6 cwt. 2 qrs. 19 lb. the pen, but the quality was excellent, and they handled firm and well. Mr. R. Overman's second and third prize pens were by a long-woolled ram out of Southdown ewes, and the latter pen weighed no less than 8 cwt. 0 qrs. 10 lb.; both these pens were beautiful sheep, full of mutton, but we cannot say they were better than Down sheep. Mr. Rush showed two pens of crosses out of Southdown ewes by a Cotswold ram, and Mr. Crawshaw two pens of crosses out of Hampshire Down ewes by a Cotswold ram; the former were commended, and the latter one was very useful. The cross-bred lambs were big, but rather coarse, Mr. Robinson's first prize pen weighing 5 cwt. 1 qr. 11 lb., and were by a cross-bred ram out of Hampshire ewes, and therefore mongrels. Mr. Lewin's pen of crosses between Hampshire Down ram and Lincoln first cross ewes were more to our mind in every way.

The Down classes were filled with as good a lot of sheep as have ever been seen at Islington, taking them all together. The Southdowns were in strong force, the pens of three wethers numbering 18 entries. Lord Walsingham

—as usual we may now say—took first and second prizes away from every strong competition. Neither of these pens were, perhaps, as good as some of his exhibits on former occasions, but they were very first rate and hard to beat. The Merton sheep are always in excellent show form, and they are nearly always good in front; they always meet one well, and that is a great point in their favour. Neither of these pens were very evenly matched for show sheep, still they won fairly enough, and the quality was beautiful; the weights were 5 cwt. 3 qrs. 14 lb. and 6 cwt. 0 qrs. 11 lb. respectively. Mr. Humphrey's third prize pen were excellent sheep, but not so fine, though their weight was not much greater—6 cwt. 1 qr. 6 lb. The Priests of Wales showed two pens, one of which might have been commended, as the quality was excellent, but they were not very firm under the hand. The Goodwood flock was represented by a pen of very pretty sheep, which were highly commended by the judges, and another pen not so well made up. Messrs. Emery's and Mr. Coleman's sheep also came in for honours, though the latter had more fat than flesh, and are soft handlers. The Southdown ewes were also very excellent; Mr. Penfold's pen taking the breed cup for the best pen of Southdown as well as the reserve number for the Champion plate. It would be difficult to find better ewes than these, for their character and get up was first-rate; they handled to perfection, and their weight was 5 cwt. 2 qrs. 10 lb. The whole class was very justly commended by the judges. Some good lambs were shown, and the first prize taken fairly by Mr. Coleman for a very pretty and even pen handling like wethers. Messrs. J. and A. Heasman's second prize lot were very handsome, and Sir F. W. Fitz-Vygram also exhibited good lambs. The Hampshire Downs were another capital lot of sheep, Mr. A. Morrison taking first prize with wethers, and also the Breed Cup; they were good backed, firm handling sheep as his generally are. There was also a good show of ewes. The lambs in this division were not better than last year, but there were some capital pens in the eight entries. The Shropshires made a capital show, eleven pens of wethers being in place. Lord Chesham took first and third, also the Champion Plate of £50 for the best pen of sheep in the show; they weighed 6 cwt. 3 qrs. 20 lb., and had a long tussle with Mr. Penfold's Southdown ewes for the Championship, which was ultimately decided in their favour. These sheep were very neat, very stylish, and very good all over, but they did not handle to our mind like ewes; size and weight appeared to decide it. It is a hard thing for ewes to win champion plates, unless they are a very long way ahead, like Mr. Pear's ewes last year. Mr. T. Nock's second prize lot were much bigger sheep and of a very different style and character; we think it not unlikely that the generality of breeders would consider them more useful Shrops. He also won with his lambs. Mr. Beach, of the Hattons, also showed two good pens of wethers. The Oxford Downs were a small show, but the quality was good, Mr. Brassey

and C. Howard taking first and second prizes for wethers, and the latter being first with lambs, which were very good quality and heavy weights. The sheep classes were good throughout, and the average quality has probably never been better.

### PIGS.

The crowded state of the lower hall, where the pigs were shown, rendered it impossible for us to make anything like a careful inspection of what appeared to be a very excellent show; the entries generally seemed to be of good quality and all the breeds were well represented. Sanitas smelt even more strongly than the pigs, and, of the two, was less objectionable.

### THE ROOT STANDS.

After inspecting the live stock most people are disposed to say "Let us go and look at the roots," and, it may be added, those who form that determination early in the day have the best chance of seeing what they go to look at, as it is almost impossible to get near these very attractive portions of the show in the afterpart of the day. Messrs. Sutton and Sons, of Reading, had a magnificent show of roots this year—certainly the best we have seen in the Hall for many years, if not the best we have ever seen. For this excellence they have to some extent to thank the Reading Sewage Farm, which appears to have quite taken the lead in root growing. Roots grown on this farm were exhibited on the stand, taken from crops said to be of the following enormous weights per acre: Mammoth Long Red, 110 tons; Golden Tankard, 88 tons; Berkshire Prize, 77 tons. The roots were, of course, weighed as pulled, with their tops on. We believe the Steward of the Reading Sewage Farm is responsible for the statements as to weight, and we are informed that he in each case weighed the roots off a perch of land in different parts of the field, taking the best, worst, and medium, with the intention of getting at a fair average. The Mammoth Long Reds are said to have grown so large as very frequently to touch each other in the rows, and even to prevent each other from growing to the full size which they otherwise would have attained. The Berkshire Prize mangels struck us as being the finest collection of all on the stand, and we have never seen a better lot anywhere; but the Mammoths, Golden Tankards, and Intermediates were remarkable both as to size and form. Champion swedes and the various kinds of white turnips were well represented. Messrs. Sutton also showed some splendid specimens of kohlrabi, a fine collection of potatoes, 250 varieties of natural grasses, onions, carrots, cabbages, and other vegetables.

In going round the galleries the next root stand we came to was that of Messrs. Harrison and Sons, of Leicester, on which were displayed field roots and garden produce of various kinds. Their Normanton Globe and Giant Long Red mangels were very fine and well formed specimens, and their Defiance swedes showed quality in addition to large size. They

exhibited also some new varieties of potatoes, onions, carrots, and other vegetables. The roots on this stand were remarkable for symmetry and quality.

To Messrs. Webb and Sons, of Stourbridge, belongs the credit of having exhibited the finest specimen of a mangel root in the Show. This was a very remarkable Mammoth Long Red, weighing, when trimmed, no less than 62½ lb., a great weight which we believe has never been equalled. For a root of such a size the quality and form were also remarkable. There was also a display of very fine roots of the same variety, and a capital show of Webb's Kinver Globe, Yellow Intermediate, and Yellow-fleshed Tankard Mangels. Webb's Imperial Swede, a variety said to have produced the enormous crop of 4½ tons 16 cwt. 1 qr., 26 lb., was also admirably represented. There were also some very fine specimens of Green Globe, White Globe, Grey Stone, and Beef Heart turnips, and some large and well-grown kohlrabi. A special feature of Messrs. Webb's exhibition was their collection of selected cereals, comprising their Challenge wheat, Prolific Black and White oats, and Kinver barley; also their collection of natural grasses. Messrs. Webb are doing a very useful work in paying careful attention to the improvement of our stocks of corn, and now that the Royal Agricultural Society has offered prizes for seed corn we may expect this department of seedsmen's enterprise to come into greater prominence than it has previously attained. There is a wide field for improvement, and if the very great success which has been secured in the perfecting of the various strains of roots should be equalled in respect of white straw crops there will be occasion for sincere congratulation. Messrs. Webb, with Major Hallett, Mr. Shirriff, have already done a great deal, and we may expect that and others the new impetus given to their efforts by the Royal Society will stimulate their further efforts.

Messrs. George Gibbs and Co., of Piccadilly, had a grand show of roots and other vegetables. We noticed particularly their fine specimens of field cabbage, and their collection of mangels, swedes, and white turnips contained some admirable specimens. Messrs. Dick Radclyffe and Co. also had a stand displaying various kinds of field and garden produce, and requisites. Messrs. Raynbird, Caldecott, & Co. showed seeds, grasses and roots.

We came next to the large and well-arranged stand of Messrs. Carter and Co. who had a magnificent display of roots and various vegetables. Their Warden mangels were a remarkably fine lot, and their Intermediates, if possible, were, for their kind, better still. There was a lot of very large Mammoth mangels, the variety which a few years back was credited with producing the great weight of 97 tons per acre under ordinary cultivation without sewage. In our notice of Messrs. Carter's root show we referred to a novelty in the form of an exhibition of mangels grown by their customers in Canada, one of which, when pulled, is said to have weighed no less than 63 lb. Their Imperial Prize-winner swede also put in a good appearance, being represented by specimens from a crop which, we are informed,

wighed no less than 43 tons per acre on a large piece of 42 acres. This remarkable crop was grown in Somersetshire, on Mr. Askell's farm, which recently won one of the Royal Society's prizes. In turnips, Carter's Improved Purple-Top Mammoth, Pomeranian White Globe, Devonshire Greystone, and Lincolnshire Red Globe were represented by some very fine and well-grown specimens. Their Imperial Green kohlrabi also showed up well, as we fully expected it would, judging from the remarkably fine display of this root which we saw at the root show of the firm. Growing Grass-seeds, for which Messrs. Carter obtained a gold medal at Paris, were also shown, and the collection of potatoes, and field and garden vegetables of various kinds, made up a very attractive display.

Mr. King, of Coggeshall, had a stand of roots which did credit to the Eastern Counties. They had a nice show of their Champion Orange Globe mangels, the roots being large and well grown. The Orange Tankards were excellent specimens, as were also the Yellow Globes, Red Globes, and Intermediates. There were fine specimens of the Long Red and Long Yellow varieties. King's Unrivalled and Skirving's swedes were well represented. They also showed some fine roots of white turnips, and some very nice kohlrabi. The roots on this stand were the produce of ordinary farming, without the use of sewage, and it is to be noticed that they were grown in a district which suffered more than almost any other from the drought of last summer; yet they were very fine, and generally of uncommonly good quality.

Mr. Linpey, of Street, Somerset, showed some remarkable globe mangels and their roots.

#### IMPLEMENTS.

Of the implement stands on the ground floor of the Hall, Messrs. Ro y and Co., of Lincoln, occupied No. 1, with their improved traction engine, and portable and vertical engines. Messrs. Wallis and Stevens, of Basingstoke, come next, with engines and a thrashing machine. Messrs. Richard Garrett and Sons, of Leiston, Suffolk, showed a 6 h.p. portable engine with wide fire-box with corrugated crown-plate, mounted on a steel-flanged fore-carriage, and fitted with Graham's spark extinguisher, which has been successful in recent trials in Germany. This engine is fitted for burning logs of wood or saw-mill refuse as well as coal. They also exhibited an 8 h.p. semi-portable engine, the fire-box of which is corrugated both internally and externally, made by way of testing what can be done in this way to increase the capability of expansion, without diminishing strength, by doing away with stays and bolts. There were also on this stand a thrashing machine embodying various improvements, and a good collection of the drills, and horse hoes, for which Messrs. Garrett have so long been famous. Amongst the horse hoes is No. 11, an implement of new and improved design. Messrs. Garrett have this year celebrated the centenary of the establishment of their firm.

Messrs. Hornsby and Sons, of Grantham, are always giving something new in the form of a fresh adaptation of their reaping-machine appliances. On this occasion they showed a new reaper, the "Matchless," a machine of

great simplicity, to be worked with four or six rakes, one, two, or three of which can be used to deliver the sheaves, or all for swathe delivery. It has adapted to it a new arrangement, placed within reach of the driver's hand, for altering the height of cut instantaneously, working through the main axle; also a lever, to be worked by the foot, for putting the cutting apparatus in or out of gear. The Spring Balance reaper, with controllable rakes, and the other reapers and mowers so well known were also exhibited. Amongst a great collection of ploughs we noticed a new two-furrow plough, with iron-plated wood beam, which can be altered into a single plough in ten minutes by taking out two bolts. Messrs. Hornsby also showed a new two-knife turnip cutter, "M.C.D.," with wrought-iron grating hopper, so arranged that the roots all fall to the disc, thus rendering the machine as nearly a self-feeder as practicable. Hornsby's hedge-cutting machine, thrashing machine, and other articles were also exhibited. Messrs. Barrows and Stewart, of Banbury, showed a vertical engine on three travelling wheels, intended especially for chaff-cutting and grinding operations; also a portable engine improved and rendered as simple as possible in its working parts. Messrs. Tasker and Co., of Andover, exhibited portable engines, dressing machines, and a thrashing machine with drum guard. Mr. T. G. Darby's "Pedestrian Digger" attracted great attention, there being constantly a crowd of visitors round this new and strange looking implement.

Messrs. John Fowler and Co., of Leeds, had their usual large display of their farmers' cultivating machinery and engines. The engines have been greatly improved, by the use of steel gearing, the adoption of single cylinders wrought-iron crank shaft brackets, and other adaptations. The fire-box is now constructed with a circular top, instead of the ordinary square top, and is stayed on the rear partly by three ordinary stays. This prevents the accumulation of mud on the top of the box, and greatly lessens the danger of burning it when the water is low. The mechanical arrangement by which the slow motion of the coiling gear is obtained has been simplified and greatly improved during the last year. As compared with the arrangement formerly used, a greater height of the coiling gear above the ground, and an increased depth of the drum brush, has been obtained by the new construction. The patent 8-h.p. road locomotive exhibited is of a new design, and is intended to do the heaviest class of haulage, and to be continually working under varied circumstances, and with very heavy and unequal strains. Messrs. Fowler also showed a model of their portable railway, which requires no sleepers, and a specimen piece of the railway, with a truck. Messrs. Clayton and Shuttleworth exhibited portable and traction engines, a stacking machine, and a thrashing machine with self-feeder and drum-guard. Messrs. Humphries, of Pershore, have adapted a very simple drum-guard, consisting merely of folding boards, to their thrashing machine. Messrs. Burrell and Sons, Thetford, exhibited 8 and 10 h.p. engines with patent winding drum.

Mr. F. Savage, King's Lynn, showed one of his patent "Agriculturist" 10 h.p. winding and traction engines with spur-gear, suitable for steam cultivation, thrashing and general traction purposes. It is well adapted to Mr. Savage's special system of steam cultivation which we have noticed on previous occasions in these columns. Messrs. Allechin, of Northampton, and McLaren, of Leeds, showed their respective traction engines. The latter has been often noticed in these columns; it has been fitted with recent improvements. Messrs. Davey, Paxman and Co., of Colchester, had an 8 h.p. portable engine, fitted with patent water-heater, and wrought-iron carriage and wheels; a 4 h.p. and a 3 h.p. vertical engine and boiler, with patent water-heater and expansion slide; and a 4 h.p. horizontal engine.

Messrs. Howard, of Bedford, showed their farmers' engine and apparatus, which is now well-known as an excellent single engine system for the farmers own use. They also exhibit a variety of ploughs, including the Champion plough, with a novel arrangement of screwed wheel fastenings; a new wood beam double plough, which is readily convertible into a single plough; a triple plough; a reversible double plough for ploughing the furrows all one way, and their new turnover plough. Messrs. Howard also show their zigzag harrows, their self-lifting drag harrow, and their flexible steel chain harrow for cleaning pastures, their new self-acting horse rakes, and their haymaking machine, with a seat for the driver. The "Simplex" mower is steel geared, is fitted with a tapered steel finger-bar, has a wrought iron drag-bar, and a very pretty device for instantly releasing the knife from the connecting rod. The quick running crank spindle is hollow, and serves as an oil reservoir. The "Simplex" reaper is steel-geared, and the main wheels, like those of the mower, are mortice-geared to prevent clogging in damp weather. This machine is fitted with a lever for giving pitch to the finger-bar to deal with laid crops; the rakes are controllable to regulate the size of sheaf, the height of cut can readily be adjusted, and the platform can be folded up for travelling. It has been much improved since we first noticed it. Messrs. Aveling and Porter, of Rochester, showed their new agricultural locomotive engine, one of the chief features of which is the arrangement by which the crank shaft and countershaft gearing is mounted on shafts between bearings, and not on the overhanging ends of shafts outside bearings. By this arrangement it is claimed that the bearings are more fairly worn, the gearing is maintained rigidly; small pinions and large spur-wheels are alike dispensed with, the employment of an intermediate countershaft securing the reduction of speed between the crank shaft and the driving wheels without resorting to large differences between the diameters of wheels. Other improvements have also been adopted.

Messrs. Holmes and Sons, of Norwich, have improved their excellent seed sheller, by fitting to it a new drum and improved shells. We know from practical experience that this machine as a sheller of cloverseed is a very good

one—the best manufactured, we believe. Messrs. Holmes and Sons also showed their thrashing machine with truss d frame, and fitted with a drum guard held by a ratchet and spring; also drills, turnip engines, &c.

On Stand 19 a new traction engine, on a principle invented by Mr. George Wiltshire, of 40, Gracechurch Street, attracted much attention. We shall describe this engine on a future occasion. Messrs. Eddington and Co., of Chelmsford, showed a new contractors' portable engine. This engine is constructed with a large amount of boiler room and heating surface. The fire-box of the boiler is circular, without stays, and by taking out one row of rivets and tubes it is readily taken out and replaced. There is ample room for a person to get inside the boiler and examine and clean it in every part—a very great consideration when it is used as a fixed engine or with hard or muddy water. The blow-off cock being placed at the lowest point in the boiler, all the sediment is easily blown out.

Messrs. Ransomes, Sims, and Head, of Ipswich, showed their new 6 h.p. traction, 12 h. p. semi-portable, and 8 h.p. portable engines, their thrashing machine fitted with latest improvements, new convertible double plough, prize Kent plough, new large horse rake, self-acting horse rake, improved haymaker, and their usual variety of ploughs and other implements. They also exhibited their new patent drum guard, which is so constructed that it is almost impossible for anyone to fall into the drum of the machine. A self-acting flap or shutter which, when down, completely closes the mouth of the drum, is so arranged that when open it does not interfere with feeding the machine, but will drop instantly and close the drum if anyone falls either on to the hood or feed board. Sweepings can be swept into the drum as usual. The parts are so arranged that the mouth of the drum can be opened wider when required; a piece of board can be removed from the platform at the back of the hood, and allows the hood to be set back, which makes the mouth wider.

The Beverley Waggon Co. exhibited specimens of their well-known agricultural carriages, a portable steam engine, thrashing machine, bone mill, wheels, and axles. Messrs. Turner showed their portable engine, vertical and horizontal "Gippeawyk" engines, mills, &c. On Messrs. Jeffrey and Blackstone's stand we noticed the haymaker which obtained a prize medal at Paris; also horse-rakes, chaffcutters, and vertical engine. Messrs. Woods, Cocksedge, and Co., of Stowmarket, had a new treble-action rootcutter, which cuts in large slices, in finger pieces, or pulps at pleasure. Their crushing mill received a gold medal at the Paris Exhibition. To their compact and simple vertical engine was awarded a bronze medal at Paris. They showed also a large assortment of mills, chaffcutters, farm carts, and other agricultural requisites. Messrs. Marshall, Sons, and Co. had a traction engine fitted with two speeds, steel gearing, winding drum, and other improvements, an 8 h.p. with patent automatic expansion gear, adapted for driving apparatus for producing the electric light; a thrashing machine

fitted with patent self-feeder and drum guard; a 5 h.p. portable engine; and an 8 h.p. automatic portable engine. The Reading Iron Works Co. exhibited their spring pulleys, as shown at Bristol, portable and horizontal engines, nozzle boiler, chaffcutter, mills, and horse-power thrashing machine.

Messrs. Ruston, Proctor, and Co., of Lincoln, exhibited their traction, 8 h.p. portable, 2 h.p. portable, double cylinder, and horizontal engines, and their thrashing machine with patent self-feeder and drum guard combined. They received four prize medals for their engines and machines at the Paris Exhibition. Messrs. Gibbon's 8 h.p. portable thrashing machine, with self-feeder and drum guard, has an improved chaff-bagging apparatus fitted compactly between the wheels, so as to pass anywhere where the wheels will pass. Messrs. Nalder and Nalder showed thrashing machine; Messrs. Brown and May, engines; and Messrs. Croskill and Co., a bone mill, and agricultural carriages.

Of the machinery in the galleries we first notice what we regard as the most important novelty in the Show, Messrs. Burgess and Key's self-binding reaper. In writing previously on self-binders we have remarked on the advantage of having a binder platform on a level with the reaper platform, and this desideratum Messrs. Burgess and Key's machine realises. Of course, without having seen their binder at work we cannot speak with confidence as to its success; but we are so much pleased to see a binder of that form that we shall be greatly disappointed if it does not prove itself all that it should be in the field. This new patent consists of a second platform placed at the delivery side of the ordinary collecting platform of Messrs. Burgess and Key's self-raker reaper, with knotting apparatus at its rear end. The sheaf as it leaves the original collecting platform is received by the second platform precisely as it would in the ordinary course fall on to the ground; it is then drawn by a gatherer composed of a set of prongs projecting upwards towards the rear end of the machine; then a string led up through the platform and stretched across the middle of its path receives the sheaf immediately under a pair of compressors, hinged from above, which close upon the sheaf at the same time that the upper end of the string is lowered over it and tucked in behind, so as completely to encircle the sheaf. The string is then tied with a firm double knot and cut off. The compressors then open, a fresh length of string stretches across the opening, the bound sheaf falls off behind, and the gatherer returns to the other end of the platform ready for the next sheaf. The mechanism of the knotter is such as would hardly be understood without the aid of drawings; but it is very simple and apparently quite certain in its action. The general appearance of the binder is strikingly simple, and the fact that it can readily be removed and the reaping machine used without it as an ordinary self-raker is an additional recommendation.

Mr. Le Butt, of Bury St. Edmunds, exhibited barley and malt screens, a haymaker, and hand drill. Messrs. J.

Hughes and Sons, of Great Dover Street, London, show d samples of mill-stones, corn bushels, sack-barrows, mill bands, &c. Millers require sites are prohibited, as not agricultural, by the Smithfield Club, so that Messrs. Hughes could not make their usual effective display. Mr. Mumford, of Colchester, has greatly improved his seed cleaner, by making the splices easily adjustable, so as to suit various kinds and conditions of seed and corn. This is a great advantage.

General improvements in detail have been made in Mr. Walter A. Wood's self-binding harvester, to which was awarded a *prix unique* at the Paris Exhibition, and which also obtained twenty first prizes in 1878. Mr. Wood has received a large number of testimonials certifying the success of his machine. Messrs. Coleman and Morton, of Chelmsford, exhibited specimens of their famous water carts, cultivators, adjustable rotary corn screens, garden engines, &c. Messrs. Picksley, Sims, and Co., of Leigh, showed their strong and effective reaper, mower, chaffcutters, mills, and horseworks. We noticed the good work done by their reapers and mowers in our reports of the Oxford Show.

A formidable list of awards, given to Messrs. Harrison and McGregor for their "Albion" mower during the past season shows its general appreciation by those who have tested it. They showed this and their self-raking reaper, and their one-horse combined mower and reaper. They have adopted several improvements for the coming season. Messrs. D. M. Osborne and Co., of Liverpool, exhibited their self-binding harvester, mower, grindstones, &c. The self-binders were favourite objects of attention during the show, and Messrs. Osborne's came in for its full share of attention. It has been improved by widening the cut and adopting arrangements for opening the elevators and for raising or lowering the height of cut. Messrs. Edmondson and Co., agents for Aultman and Co., showed "Buckeye" mowers and a hand delivery reaper.

Messrs. Waite, Burnell, Huggins, and Co., of London, exhibited McCormick's Royal Agricultural Society's Gold Medal self-binder, which has also obtained the *grand prix* at Paris and numerous other prizes in Great Britain and foreign countries during the past season. They also showed a selection of manure forks, hay and straw forks, &c.

Messrs. Vipon and Headley, of Leicester, showed the milk-cans which we referred to in terms of praise in our report of the Dairy Show, where they obtained the second prize; also ploughs, milk carriages, horse hoes, new root-pulpers for hand and steam power, &c. Mr. J. H. Knight of Weybourne, Farnham, exhibited his steam digging machine, referred to as a strong and effective implement in previous show reports.

We do not remember to have previously seen the self-adjusting horse-hoes invented by Messrs. Barnard and Lake, of Braintree, although they have been out two years. The arrangement for altering the width of cut is extremely simple and easy, and the alteration can be effected in a moment, which is a very great advantage, as it enables

the driver to adjust the width of his hoes so as to suit varying distances between the rows of plants as he goes along.

Messrs. Corbett and Peele, of Shrewsbury, showed their "Eclipse" combined corn winnower, elevator, and weighing machine, for which they obtained a silver medal at the Paris Exhibition. If we are going to sell all corn by weight some such combination as this will be invaluable to farmers and merchants. The weighing apparatus is self-acting; that is to say, the corn is shut off as soon as the scale turns. If by this means a sack of corn can be weighed exactly, the advantage of using the combination is obvious. The dressing machine, which has obtained a Royal and several other first prizes, is too well known to need description. Messrs. Corbett and Peele also showed some of their ploughs, a drills, and other implements.

We mentioned in our report of the Royal Show at Bristol that Messrs. James Smythe and Sons had effected some important improvements in their excellent corn and seed drills, which we then described. It has been still further improved since, by the perfecting of the new adaptations. These consist of newly patented hoppers, which do not require to be removed when the cup barrel has to be taken out of the box; newly patented support bearings, which drop away instantaneously when the cup barrel has to be removed; newly patented cog wheel gearing, which gives more variation in quantity of seeding with eight cog wheels than was formerly attainable with 12; and newly patented cog wheel arrangement for hilly land.

One of the simplest and easiest steering horse hoes that we have ever seen is that shown by Messrs. Brown and Son, of Leighton Buzzard. Not only can the implement be steered with uncommon facility, but the pitch of the hoes can be altered instantaneously by simply turning a wheel close to the steering handles. Thus the driver can alter the depth of hoeing at pleasure, and without stopping. Any farmer will readily appreciate the immense advantage of this. The levers work independently.

Woods and Whewell's Patent Turning Steam Plough, shown by Messrs. Leeming and Son, of Bradford, was one of the most striking novelties in the Hall. The inventors claim for this turning plough great advantages over the old balance plough. The advantages claimed by the inventors for this implement are the saving of land at the headlands, and the avoidance of delay at each end of the field caused by the ploughman having to change ends and to get into position for the return journey, both of which are secured by the turning arrangement, which enables the plough to be drawn close up to the windlass or engine and turned quickly at the headland, the ploughman never leaving his seat. It is also stated as an advantage that there is also no necessity for the ploughman to put pressure upon the plough frames to keep them in the ground, as is sometimes the case with the balance plough; neither is there any occasion for any pressure

to be put on the slack rope in order to add weight to the end of the frame. Until we have seen this plough at work we can, of course, pronounce no opinion on its merits.

At agricultural shows we are all on the alert to look out for something new, but old favourites demand a notice, if only for old acquaintance sake. Fortunate is the manufacturer who, having brought out a good thing, can go on making and selling it for years without finding it superseded by later inventions. Few machines have held their ground as long as Boby's famous barley screen. At every great show, for more years than we can exactly state, we have seen it; but we have yet to see its conqueror.

Aspinwall's Potato Planter, improved for the coming season, was shown by Messrs. J. W. Robinson and Co., of Liverpool. The same inventor's Potato Raiser, with recent improvements, was also shown on this stand.

The "Farmer's Bone Mill," a new machine, was exhibited by the Saville Street Co., of Sheffield. This mill is entirely self-contained with its revolving screening apparatus. It can be mounted upon wheels for travelling, and moved comfortably with one horse. The rolls can be expanded for rough crushing, large bones, knuckles, &c., by a simple screw arrangement, and then set up to reduce to dust and half inch. By the use of Hall's patent differential gear the high velocity of the belt running from the flywheel of any portable engine is at once reduced on the roll shaft, multiplying the power—say 16 times. The rolls are driven by an improved friction arrangement, enabling them to slip in the event of any foreign substance getting in. The frame consists of a simple strong box casting, giving great strength and rigidity. The rolls can be removed at any time, and plain chilled rolls inserted in their places for crushing coprolites, phosphates, guano, &c. We are informed that this mill will crush, fit for manure, about four tons of bones per day. The rings of teeth are mounted upon the rolls, and can be easily removed or renewed at slight cost in case of breakage. Separate cleaners are fitted at the top of the frame for cleaning the teeth of soft bones, &c. The whole is substantially built, of recent design, and can be driven by a three horse-power engine, or bullock gear. On the same stand were shown some chilled rollers for grinding middlings.

Messrs. J. Rollins and Co., of London Bridge, exhibited the "Farmers' Friend" grain drill, which obtained a prize medal at the United States' Centennial Exhibition, and a gold medal at the Paris Exhibition. One of the chief peculiarities of this drill is its arrangement for distributing or "feeding" the grain. The feed wheel is cylindrical in shape, slightly concave, and has eight zigzag ribs on its surface, which elevate the grain and force it out. These alternating diagonal ribs working in conjunction, force the grain from either side of the cup toward the centre, making the flow of seed continuous and regular; and from these two distinct actions or motions the term "double force feed" is derived. The ribs do not serve

regulators, but as carriers for the grain which occupies the cavities formed by them and the space beneath in the hop, in its passage around the wheel; and they are so formed that at no point is the discharge of grain obstructed, but whether sowing a large or small quantity the flow is unceasing, and bunching or skipping an impossibility. It is especially adapted for sowing oats, barley, and any bearded grain, as the feeder will draw in anything that comes to it, and as the ribs take it first from one side, and then the other, it is constantly forced forward toward the discharge opening. Other special features are the cone gearing, for regulating the quantity to be sown without loosening or changing the parts; a cog gearing, without loose wheels, to vary the amount of seed sown, as may be necessary on account of the different strength or richness of the soil, without stopping the team; the "rear shifter," for clearing the hoes or coulters of rubbish; and the "surveyor," for ascertaining the acreage sown. Messrs. Rollins also showed a "Hollingsworth" horse rake with adjustable spring teeth, and a large selection of American tools, including Batcheller's highly-tempered elastic cast steel hay and manure forks. Messrs. West and Co., of Bromley, showed Wiles's Patent Ring Governor, a new invention, which we cannot effectually describe without the use of diagrams.

Messrs. Crowley and Co., of Sheffield, exhibited their Safety Lever Chaff Cutter, for which they obtained a gold medal at the Paris Exhibition. In these machines the feed can be reversed, the length of cut changed, and the machines stopped by the use of one lever only.

Neale's Self-binding Reaper, which has been several times referred to in our columns, was shown in an improved and simplified form, and attracted much attention.

Messrs. Samuelson and Co., of Banbury, showed their well known reapers and mowers, in which we did not notice any alteration calling for comment.

Mr. W. Anson Wood showed the mower which was used as a trophy on the occasion of the awarding of prizes at the Paris Exhibition, and which, we believe, obtained a prize. Messrs. Ord and Maddison, of Darlington, exhibited the Koldmoos Weed Eradicator, repeatedly noticed in our reports.

Amongst the sheaf-binding reapers was King and Bonford's patent, shown by Messrs. Hetherington and Co., of Manchester, noticed in our report of the Royal Show at Bristol. The corn, deposited on the platform of the reaper, is by means of rakes quickly drawn together in the sheaf form; it is then bound by string, which is cut off to the length required to make a secure fastening; the ends of the string are then twisted together by a special apparatus, and afterwards doubled under and over the band of the sheaf.

Pamphilon's Farmyard Manure Distributor has been improved since we last saw it by the introduction of a new cleaning fork, which, besides cleaning the spreader, keeps the manure for a longer time under its action. This object has also been still further attained by increasing the depth

of the machine. A newly-patented means of attachment, a single rod of iron, has also been adopted, by which means the machine can be attached to and detached from the dung-cart from before, by the man who drives it.

Mr. H. Denton, of Wolverhampton, showed his patent grass harrows, "Universal" horse hoe, horse works, improved turnip hoe and grubber, rollers, &c. Messrs. Hart and Co., of City Road, exhibited a specimen of their weighing machine for live stock, which, we predict, will some day be more generally used than they are at present. He also showed other weighing machines without loose weight. Mr. Henry Gooch, of Harleston showed his prize dressing machine, fitted with a corn-elevator and sacker, a combination which will come generally into use if corn should be sold universally by weight.

#### MANURES, FEEDING STUFFS, &c.

Messrs. Proctor and Ryland, of Birmingham, showed samples of their manures, and some fine roots of various kinds grown with the aid of the same. Amies' Chemical Manure Co., of London, also showed their manure, together with some remarkable potatoes, roots, and cereals grown with its use. This manure is also used for fruit and flowers. Mr. Tipper, of Birmingham, exhibited his cattle foods and "Medicated Mystery." Messrs. Ayres, Chambers, and Ayres, of Hull, showed oilcakes; Mr. Barr, of Liverpool, cattle food; the Agricultural and Horticultural Association, manures, feeding stuffs, &c.; Messrs. Day, Son, and Hewitt, of London, their cattle medicines; J. Beach and Co., Dudley, Beach's Farinaceous Food; Day and Son, Crew, cattle medicines; the Driffield Co., Driffield, cakes; Mr. W. Hope, Islington, cattle and poultry food; Joseph Thorley, cattle food. Messrs. Ohlendorff and Co., exhibited their dissolved Peruvian guano, for which they gained a gold medal at the Paris Exhibition. Messrs. Matthews and Son, of Driffield, inform us that they were too late for entry.

#### LIST OF JUDGES.

##### CATTLE.

##### Division 1.—Devons, Herefords, Sussex.

Walter Farthing, Stowey Court, Bridgewater, Somerset.  
H. Heywood, Blakemere Ho, Nr. Hereford.  
Thos. Cooper, Norton, Bishopstone, Lewes.

##### Division 2.—Shorthorns and crossed or mixed.

Hugh Aylmer, West Dereham Abbey, Stoke Ferry, Norfolk.

Thomas King Harding, Rodmead, Maiden Bradley, Bath.  
Chris. Stephenson, Woburn, Beds.

##### Division 3.—Norfolk or Suffolk Polled, Scotch (all classes), and Welsh.

Jerh. Seago, Stoke Holy Cross, Norwich.  
Jno. Thompson, Badminton, Chippenham.  
Robt. Bruce, Gt. Smeaton, Northampton, Yorks.

##### SHEEP.

##### Division 4.—Leicesters, Cotswold, Lincoln, Kentish or Romney Marsh.

T. H. Hutchinson, Manor Ho., Cotterick, Yorks.



W. T. Garne, Aldsworth, Northleach.  
 Edwd. J. Davy, Owersby, Market Rasen.  
 DIVISION 5.—Southdowns, Hampshire or Wiltshire  
 Downes, Cheviot, Mountain, Ryeland, and Dorset, &c.  
 G. T. Williams, Buckland, Faringdon, Berks.  
 G. Symonds, Monkton, Dorchester, Dorset.  
 G. Rutherford, Prittsman, Coldstream, N.B.  
 DIVISION 6.—Shropshire, Oxfordshire, and Cross Bred.  
 R. H. Masfen, Pendeford, Wolverhampton.  
 A. F. M. Druce, Fyfield, Abingdon.  
 Edwd. Little, Lanhill, Chippenham.

## PIGS.

## Division 7.

Heber Humfrey, Kingstone, Ashbury, Shrivensham.  
 Jno. Tazewell, Haygrove, Bridgewater  
 Manfred Biddell, Playford, Ipswich.  
 SPECIAL JUDGES for £50 cup, steer or ox; £50 cup,  
 heifer or cow; 100 guinea champion cup.  
 John Thompson, Badminton, Chippenham.  
 Chris. Stephenson, Woburn, Beds.  
 Jerh. Seago, Stoke Holy Cross, Norwich.  
 £50 Champion Cup, Sheep.  
 Edward Little, Lanhill, Chippenham.  
 G. T. Williams, Buckland, Faringdon, Berks.  
 Edward Davy, Owersby, Market Rasen.

## PRIZE LIST.

## CATTLE.

## DEVONS.

Class 1.—Steers, not exceeding 2 years and 6 months old  
 First Prize, £25, to H. Senior, Rushton, Blandford, Dorset.  
 Second, £15, to H. Senior, Rushton, Blandford, Dorset.  
 Third, £10, to Major Bullen, C.B., Downes, Crediton.  
 Commended.—H.R.H. the Prince of Wales, K.G., Sandringham.  
 Class 2.—Steers, not exceeding 3 years and 6 months old.  
 First prize, £25, to J. B. Overman, Burnham Sutton, Lynn.  
 Second, £15, to H.R.H. the Prince of Wales.  
 Third, £10, to Messrs. Jackman and Bickle, Hexworth, Launceston.  
 Commended.—John Walter, Esq., M.P., Bearwood, Wokingham.  
 Class 3.—Devon Steers or Oxen, above 3 years and 6 months, and not exceeding 4 years and 6 months old.  
 First prize, £25, to W. Smith, Whimble, Devon.  
 Second, £15, to Major Buller.  
 Third, £10, to J. Overman.  
 Commended.—Major Buller.  
 Class 4.—Devon Heifers, not exceeding 4 years old.  
 First prize, £20, to J. Watter, Esq., M.P.,  
 Second, £10, to W. Smith, Whimble.  
 Third, £5, J. Overman.  
 Class 5.—Devon Cows, above 4 years old.  
 First prize, £20, to Mrs. Maria Langdon, Flitton Barton Devon.  
 Second, £10, to J. Walter, Esq., M.P.  
 Third, £5, H. Kelsey, Crowhurst, East Grinstead.  
 Commended.—W. Smith, Whimble.

## HEREFORDS.

Class 6.—Hereford Steers, not exceeding 2 years and 6 months old.

First prize, £25, to R. Wortley, Suffield, Aylsham, Norfolk.  
 Second, £15, to The Earl of Powis, Lydbury, North Shropshire.  
 Third, £10, to L. Loyd, Addington, Croydon.  
 Highly commended, J. Morris, Madeley, Hereford.  
 Commended, H. Iustone, Couude, Shrewsbury.  
 Class 7.—Hereford Steers, not exceeding 3 years and 6 months old.

First prize, £25, to The Earl of Powis.  
 Second, £15, to L. Loyd.  
 Third, £10, W. Groves, Broughton, Shrewsbury.  
 Commended, L. Neaine, Harefield, Selling, Norfolk.  
 Class 8. Hereford Steers or Oxen above 3 years and 6 months, and not exceeding 4 years and 6 months old.  
 First prize, £25, to R. Wortley.  
 Second, £15, to The Earl of Darnley, Cobham Hall, Gravesend,  
 Third, £10.  
 Class 9.—Hereford Heifers, not exceeding 4 years old.  
 First prize, £20, to J. W. James, Mappowder Court, Dorset (Nelly Care.)  
 Second, £10, to T. C. Baker, Blandford, Dorset (Totty).  
 Third, £5.

Class 10.—Hereford Cows, above 4 years old.  
 First prize, £20, to C. Williams, Glyn Teg, Cardiff (Queen of the Arrow).  
 Second, £10, to W. B. Peren, South Petherton, Ilminster (Lady Lavender).  
 Third, £5.

## SHORTHORNS.

Class 11.—Shorthorned Steers, not exceeding 2 years and 6 months old.  
 First prize, £25, to C. W. Schroeter, Tedfold Billinghurst.  
 Second, £15, to J. Stratton, Alton Priors, Marlborough.  
 Third, £10, to Col. R. Loyd-Lindsay, L.C., M.P. Wantage.  
 Commended, D. A. Green, Colchester, Essex.  
 Class 12.—Shorthorned Steers, not exceeding 3 years and 6 months old.  
 First prize, £25, to J. J. Colman, Esq., M.P., Carrow House, Norwich.  
 Second, £15, to D. M'Intosh, Havering Park, Romford.  
 Third, £10, to D. M'Intosh.  
 Commended, J. Stratton, Manningford Bruce, Marlborough; D. A. Green, Colchester.  
 Class 13.—Shorthorned Steers or Oxen above 3 years and 6 months, and not exceeding 4 years and 6 months old.  
 First prize, £25, to J. S. Bult, Kingston, Taunton.  
 Second, £15, to Sir R. C. Musgrave, Bart., Eden Hall, Penrith.  
 Third, £10, to J. Mackessack, Kinloss, Forres.  
 Commended, J. Cridlan, Great Malvern.  
 Class 14.—Shorthorned Heifers, not exceeding 4 years old.  
 First prize, £20, to R. Stratton, Newport, Mon. (Ickle).  
 Second, £10, to J. J. Ratcliff, Beech Hill, Reading (Priory Princesses).  
 Third, £5, to W. Slocombe Gibbs, Cothelstone, Taunton (May Queen).  
 Highly commended, Sir J. Swinburne, Bart., Capheaton (Grand).  
 Commended, Administrators of the late T. Simonds, Arborfield, Reading (Heythorpe Rose 2nd).  
 Class 15.—Shorthorned Cows, above 4 years old.  
 First prize, £20, to A. Longmore, of Rettic, Banff, N.B. (Loveletter).

Second, £10, to Sir W. Trevelyan, Wallington, (Contraes).  
 Third, £5, to J. A. Mumford, Thame (Lady Ducie).  
 Commended, Stand Stud Company, Whitfield, Manchester (Blooming Bride).

## SUSSEX CATTLE.

Class 16.—Sussex Steers, not exceeding 2 years and 6 months old.

First prize, £25, to G. C. Coote, Fortington, Arundel.  
 Second £15, to J. Stanford, Edenbridge.

Third, £10, to R. Neame, Faversham.

Commended.—W. R. Killick, Broxham, Edenbridge.

Class 17.—Sussex Steers, not exceeding 3 years and 6 months old.

First prize, £25, to A. Agate, Warnham, Horsham.

Second, £15, to G. C. Coote, Fortington.

Third, £10, to C. Child, Slinford, Horsham.

Commended.—G. Smith, Paddockhurst, Crawley.

Class 18.—Sussex Steers or Oxen, above 3 years and 6 months and not exceeding 4 years and 6 months old.

First prize, £25, to J. and C. Lee Steere, Jayes, Ockley, Dorking.

Second, £15, to L. Huth, Waldron, Hawkhurst.

Third, £10, to W. Burch, Selling, Faversham.

Commended.—J. and A. Heasman, Angmering.

Class 19.—Sussex Heifers, not exceeding 4 years old.

First prize, £20, to J. Woodruff, Weddington, Ash.

Second, £10, to W. Wood, Ifield Court, Crawley.

Third, £5, to J. and C. Lee Steere.

Commended.—E. and A. Stanford, Eatons, Ashurst, Steyning.

Class 20.—Sussex Cows above 4 years old.

First prize, £20, to J. and A. Heasman.

Second, £10, to R. Neame, Fairbrook, Faversham.

Third, £5, to W. H. Campion, Danny, Hurstpierpoint.

## NORFOLK OR SUFFOLK POLLED CATTLE.

Class 21. Norfolk or Suffolk Polled Steers or Oxen of any age.

First prize, £15, to J. J. Culman, M. P. Norwich, Norfolk.  
 Second, £10.

Class 22. Norfolk or Suffolk Polled Heifers or Cows.

[Heifers not having had a live Calf not to exceed 4 yrs. old. Cows above 4 years old must have had at least one live Calf.]

First prize, £15, to Mrs. Gerard Cresswell, Sandringham.

Second, £10, J. J. L. Lubbock, Norwich, Norfolk.

## SCOTCH HIGHLAND CATTLE.

Class 23.—Scotch Highland Steers or Oxen, of any age.

First prize, £25, to H.R.H. the Prince of Wales, K.G.

Second, £15, to Sir Dudley Coatts Marjoribanks, M.P., Guisachan, Beaulieu, Inverness.

Third, £10, to Sir W. C. Trevelyan, Bart., Wallington.

Class 24.—Scotch Highland Heifers or Cows.

[Heifers not having had a live Calf not to exceed 4 years old. Cows above 4 years old must have had at least one live Calf.]

First prize, £20, to J. M'Turk, Ullock, Castle Douglas, Kirkcudbright (Bindheng).

Second, £10, to Sir W. C. Trevelyan, Bart., Wallington, Newcastle-on-Tyne.

Third, £5, to Sir J. Swinburne, Bart., Capheaton, Newcastle-on-Tyne.

Class 25.—Scotch Polled Steers or Oxen, of any age.

First prize to Sir W. Gordon Cumming, Bart.

Second to W. M'Combie.

Third to H.M. The Queen.

Class 26.—Scotch Polled Heifers or Cows.

First prize to C. Stephenson, Long Benton.

Second to H. D. Adamson, Alford.

Third to J. Reid, Alford.

Class 27.—Welsh Steers or Oxen (Runts), of any age.

First prize to S. Garratt, Malden.

Second to Lord Kensington.

## CROSS OR MIXED BREED CATTLE.

Class 28.—Cross or Mixed-breed Steers, not exceeding 3 years old.

First prize, £25, to J. Stephens, Conglass, Inverurie.

Second, £15, to H. D. Adamson, Balquharn, by Aberdeen.

Third, £10, to J. Bruce, Inverquhomery, Aberdeenshire.

Commended.—A. Longmore, Rettie, Banff.

Class 29.—Cross or Mixed-bred Steers or Oxen, above 3 years and not exceeding 4 years and 6 months old.

First prize, £25, to G. Shand, Ordens, Banff.

Second, £15, to Lord Lovat, Beaulieu, Invernesshire.

Third, £10, to J. and W. Martin, New Market, Aberdeen.

Highly commended.—R. Heath Harris, Earnhill, Forres. J. Bruce, Inverquhomery.

Commended.—The class generally.

Class 30.—Cross or Mixed-bred Heifers, not exceeding 4 years old.

First prize, £20, to J. and W. Martin, New Market, Aberdeen.

Second, £10, to Lord Lovat, Beaulieu, Inverness.

Third, £5, to Sir W. C. Trevelyan, Bart., Wallington.

Highly commended.—Sir J. Swinburne, Bart., Capheaton, Newcastle-on-Tyne. H. D. Adamson, Balquharn, Alford, Aberdeen.

Commended.—J. O. Stephenson, Norton, Stockton-on-Tees.

Class 31.—Any breeds of animals (not qualified for the other classes), Steers or Oxen, not exceeding 4 years and 6 months old.

First prize to G. Taylor, Petworth.

Second to G. Smith, Epping.

Class 32.—Heifers or Cows.

First prize to J. and W. Martin.

Second to J. G. Wilson, Darlington.

## SHEEP.

## LEICESTERS.

Class 33.—Fat wether sheep of the Leicester breed, 1 year old (under 23 months).

First prize, £20, to B. Painter, Burley-on-the-Hill, Rutland.

Second, £15, to Mrs. Sophia Perry Herrick, Loughborough.

Third, £5, Mrs. S. Perry Herrick.

Class 34.—Fat ewes of the Leicester breed, above 3 years old.

First prize, £10, to T. Marris, Croxton, Ulceby.

Second, £5, to J. Green and Son, Silsden, near Leeds.

Class 35.—Fat wether lambs of the Leicester breed born in the year 1878.

First prize, £10, to B. Painter, Burley-on-the-Hill, Oakham.

## COTSWOLDS.

Class 36.—Fat wether Sheep of the Cotswold breed, one year old (under 23 months).

First prize and Breed Cup to S. Smith, Deddington.

Second to T. R. Hulbert, Cirencester.

Fat wether Sheep of the Cotswold breed, 1 year old (under 23 months.)

First prize, £20, to S. Smith, Somerton, Oxon.  
Second, £15, to T. R. Hulbert, North Cerney, Cirencester.

Class 37.—Fat Ewes of the Cotswold breed, above 3 years old

First prize, £10, to R. Swanwick, Cirencester.  
Second, £5, to J. Craddock, Eastington, Northleach.

Class 38.—Fat Wether Lambs of the Cotswold breed born in the year 1878.

No entry.

#### LINCOLNS.

Class 39.—Fat wether sheep of the Lincoln breed, 1 year old (under 23 months).

First prize, £20, to C. Lister, Coleby Lodge, Lincoln.  
Second, £15, to J. Pears, Mere, Lincoln.  
Third, £5, to C. Sell, Bassingbourne, Cambs.

Class 40.—Fat ewes of the Lincoln breed, above three years old.

First prize, £10, to C. Sell.  
Second, £5, to J. Pears.

Class 41.—Fat wether lambs of the Lincoln breed, born in the year 1878.

First prize, £10, C. Sell.  
Second, £5, C. Sell.

Class 42.—Fat wether sheep, of the Kentish or Romney Marsh breed 1 year old (under 23 months).

First prize to H. Page.  
Second to W. T. Bradbury.

Class 43.—Fat ewes of the Kentish or Romney Marsh breed above 3 years old.

First prize to J. S. Godwin.  
Second to W. de C. Baker.

#### SOUTH DOWNS.

Class 44.—Fat Wether Sheep of the Southdown breed, 1 year old (under 23 months).

First prize, £20, to Lord Walsingham, Thetford, Norfolk.  
Second, £15, to Lord Walsingham.  
Third, £5, to H. Humphrey, Pulborough.

Highly commended.—The Duke of Richmond and Gordon, K.G., Goodwood; E. and R. Emery, Storrington, Sussex.

Commended.—J. J. Colman, Esq., M.P., Norwich.

Class 45.—Fat Ewes of the Southdown breed, above 3 years old.

First prize, £10, to H. H. Penfold, Selsey, Chichester.  
Second, £5, to Major-Gen. Sir F. W. Fitz-Wygram, Bart., Havant.

Highly commended.—Lord Walsingham; E. and R. Emery.

Commended.—The whole class.

Class 46.—Fat Wether Lambs of the Southdown breed, born in the year 1878.

First prize, £10, to J. J. Colman, Esq., M.P.  
Second, £5, to J. and A. Heasman, Angmering, Sussex.  
Commended.—Major-Gen. Sir F. W. Fitz-Wygram, Bart.

#### HAMPSHIRE OR WILTSHIRE DOWNS.

Fat Wether Sheep of the Hampshire or Wiltshire Down Breed, 1 year old (under 23 months).

Class 47. First prize, £20, to A. Morrison, Tisbury, Wilts.

Second, £15, to L. Lloyd, Adlington, Surrey.  
Third, £5 to R. R. King, Southstocke, Wallingford.  
Commended R. P. King, Southstocke, Wallingford.

Class 48.—Fat Ewes of the Hampshire or Wiltshire Down breed, above 3 years old.

First Prize, £10, J. Read, Homington, bury.  
Second, £5, G. W. Homer, Dochester.

Highly commended, W. Parsons, West Stratton, Micheldever (2 entries).

Commended, J. Barton, Basingstoke; the class generally.

Class 49.—Fat Wether Lambs, of the Hampshire breed, born in the year 1878.

First prize, £10, W. Newton, Crowmarsh, Battle Wallingford.

Second, £5, F. Parker, Nasham, Alton.

Highly commended, E. Lyne, Compton, Winchester; the class generally.

#### SHROPSHIRE.

Class 50.—Fat wether sheep of the Shropshire breed, 1 year old (under 23 months).

First prize, £20, to Lord Chesham, of Latimer, Chesham, Bucks.

Second, £15, to T. Nock, Sutton Maddock, Shifnal.  
Third, £5, to Lord Chesham, of Latimer.

Highly commended.—J. Beach, Brewood, Stafford.  
Commended.—J. Beach, Brewood.

Class 51.—Fat ewes of the Shropshire breed, above 3 years old.

First prize, £10, to the Baron von Schröder, Nantwich, Cheshire.

Second, £5, to Lord Chesham, of Latimer.

Commended.—G. Cooke, Linton, Cambridgeshire.

Class 52.—Fat wether lambs of the Shropshire breed, born in the year 1878.

First prize, £10, to T. Nock, Sutton Maddock, Shifnal.

#### OXFORDS.

Class 53.—Fat wether sheep of the Oxfordshire breed, 1 year old (under 23 months).

First prize, £20, to A. Brassey, Chipping Norton.

Second, £15, to C. Howard, Biddenham.

Third, £5, to W. Cooper-Houghton, Regis Dunstable.

Class 54.—Fat ewes of the Oxfordshire breed, above 3 years old.

First prize, £10, to A. Brassey.

Class 55.—Fat Wether Lambs of the Oxfordshire breed, born in the year 1878.

First prize, £10, to J. and C. Howard, Bedford.

Second, £5, to the Earl of Jersey.

Highly commended.—A. Brassey.

#### CHEVIOTS.

Class 56.—Fat Wether Sheep of the Cheviot breed, of any age.

First prize, £15, to T. Irving, Carriestanes, Dunfermline.

Second, £10, to T. Irving, Carriestanes.

Commended.—The Duke of Roxburghe, Kelso.

#### MOUNTAIN SHEEP.

(Not being Cheviots.)

Class 57.—Fat Wether Sheep, of any white-faced mountain breed, of any age.

First prize, £15, to R. J. Stranger, North Molton.

Second, £10, R. J. Stranger.

Class 58.—Fat wether sheep, of any black-faced or speckled-faced mountain breed, of any age.

First prize to J. Peel, Kuowlmere.

Second to J. G. Wilson.

Class 59.—Fat wether sheep of the Ryeland, Dorset, or any other pure breed, not specified in any of the foregoing classes, 1 year old (under 23 months).

First and second prizes to H. Farthing.

Class 60.—Fat ewes, of the Ryeland, Cheviot, or Dorset, or any other pure breed, not specified in any of the foregoing classes, above 3 years old.

First and second prizes to H. Farthing.

Class 61.—Fat wether lambs, of the Kentish, Ryeland, Dorset, or any other pure breed, not before specified, born in the year 1878.

First prize to H. Farthing.

Second to F. Neame.

### CROSS-BREDS.

Class 62.—Cross-bred fat wether Sheep, 1 year old (under 23 months).

First prize, £20, to W. Robinson, Sharnbrook, Bedford

Second, £15, to J. R. Overman, Burnham Sutton,

Third, £10, to J. R. Overman.

Highly commended.—T. Rush, Babraham.

Class 63.—Fat Wether Cross-bred Lambs, born in the year 1878.

First prize, £10, to A. M. Robinson, Milton, Cambs.

Second, £5, to J. Lewin, Wyton Hill, Huntingdon.

### PIGS.

#### WHITE BREED.

Class 64.—Pigs of any white breed, not exceeding 9 months old.

First prize, £10, to the Earl of Radnor.

Second, £5, to J. Saunders, North Leaze, Castle Carey.

Class 65.—Pigs of any white breed, above 9 and not exceeding 12 months old.

First prize, £10, to J. T. Homer, Hems worth, Wimbome.

Second, £5, to the Marchioness of Camden, Lamberhurst.

Class 66.—Pigs of any white breed, above 12 and not exceeding 18 months old.

First prize, £10, to The Earl of Radnor, Highworth, Wilts.

#### BLACK BREEDS.

Class 67.—Pigs of any black breed, not exceeding 9 months old.

First prize, £10, to Col. Hussey, Bredy, Shipton.

Second, £5, to H. Denis de Vitre, Wantage.

Highly commended.—J. A. Smith, Akenham, Ipswich.

Class 68.—Pigs of any black breed, above 9 and not exceeding 12 months old.

First prize, £10, to J. Coate, Hammoon, Blandford.

Second, £5, to J. A. Smith, Akenham.

Class 69.—Pigs of any black breed, above 12 and not exceeding 18 months old.

First prize, £10, to W. Wheeler, Long Compton, Ship-ton-on-Stour.

#### BERKSHIRE BREEDS.

Class 70.—Pigs, of the Berkshire breed, not exceeding 9 months old.

First prize, £10, to E. Tombs, Thilton, Bampton.

Second, £5, to Harris and Biggs, Cablington, Bed.

Highly commended.—Lord Chesham, of Latimer; J. Pittman King, North Stoke, Wallingford.

Class 71.—Pigs, of the Berkshire breed, above 9 and not exceeding 12 months old.

First prize, £10, to R. Fowler, Aylesbury.

Second, £5, to C. L. Sutherland, Coombe, Croydon.

Highly commended.—C. Purvis, Beckenham, Kent.

Class 72.—Pigs of the Berkshire breed, above 12 and not exceeding 18 months old.

First prize, £10, to Lord Chesham.

Second, £5, to N. Benjafield, Motcombe, Shaftesbury.

Highly commended.—F. Tombs, Thilton, Bampton.

Commended.—The Marquis of Exeter, Stamford.

### OTHER BREEDS.

Class 73.—Pigs of any other breed, not exceeding 9 months old.

First prize, £10, to J. Saunders, North Leaze, Castle Carey.

Second, £5, to N. Benjafield, Motcombe, Shaftesbury.

Class 74.—Pigs of any other breed, above 9 and not exceeding 12 months old.

First prize, £10, to T. Coate, Sturminster Newton.

Second, £5, to The Earl of Radnor, Highworth.

Class 75.—Pigs of any other breed, above 12 and not exceeding 18 months old.

First prize, £10, to The Earl of Radnor, Highworth.

Class 76.—Single Pigs, of any breed or age.

First prize, £8, to A. Ingram, Blandford, Dorset.

Second, £4, to J. Pittman King, North Stoke, Wallingford.

Highly commended, H. Wheeler, Long Compton, Ship-ton-on-Stour.

Commended, The Earl of Radnor; N. Benjafield.

### SILVER CUPS.

For best Steer or Ox.—Silver Cup value £50, to the Exhibitor, for the best Steer or Ox in any of the Classes (except in Class 31) to J. S. Bult, Kingston, Taunton.

Heifer or Cow.—Silver Cup value £50, to the Exhibitor, for the best Heifer or Cow in any of the Classes (except in Class 32) to R. Stratton, the Duffryn, Newport, Mon.

### BREED CUPS.

#### CATTLE.

Silver Cup value £40, for the best Devon Beast, to J. R. Overman, Burnham, Sutton.

Silver Cup value £40, for the best Hereford Beast, to R. Wortley, Suffield, Aylsham.

Silver Cup value £40, for the best Shorthorn Beast, to R. Stratton, The Duffryn, Newport, Mon. (Icicle).

Silver Cup value £40, for the best Sussex Beast, to J. Woodruff, Weddington, Ash.

Silver Cup value £40, for the best Scotch Beast.

Silver Cup, to Sir Gordon Cumming, Bart, for the best Scotch polled beast.

Silver Cup value £40, for the best Crossbred Beast or any other Breed not before specified (i.e., not being Devon, Hereford, Shorthorn, Sussex, or Scotch) to G. Shand, Ordens, Banff.

#### SHEEP.

Silver Cup value £20, for the best pen of Leicester Sheep, to B. Painter, Barley-on-the-Hill, Oakham.

Silver Cup, value £20, for the best pen of Cotswold Sheep, to S. Smith, Somerton, Oxon.

Silver Cup value £20, for the best pen of Lincoln Sheep, to C. Sell, Bassingbourne.

Silver Cup value £20, for the best pen of South-Down Sheep, to H. P. Penfold, Selsay, Chichester.

Silver cup value £20, for the best pen of Hampshire or Wiltshire, to A. Morrison, Fisbury, Wilts.

Silver cup value £20, for the best pen of Shropshire Sheep, to Lord Chesham, of Latimer.

Silver Cup, value £20, for the best pen of Oxfordshire Sheep, to A. Brassey, Chipping Norton.

Silver cup value £20, for the best pen of cross-bred Sheep of any kind, to T. Rush, Babraham.

#### PIGS.

Silver Cup value £15, for the best pen of Pigs of any White breed, to The Earl of Radnor, Highworth.

Silver Cup value £15, for the best pen of Pigs of any Black breed, to W. Wheeler, Long Compton, Shipston-on-Stour.

Silver Cup value £15, for the best pen of Pigs of the Berkshire breed, to Lord Chesham of Latimer.

Silver Cup value £15, for the best pen of Pigs of any other breed, to The Earl of Radnor, Highworth.

## CHAMPION PLATES.

### FOR BEST BEAST IN THE SHOW.

A piece of plate value 100 ga., to the exhibitor of the best Beast in the Show to Richard Stratton, The Duffryn Newport, Mon., for his Shorthorn heifer.

A Piece of Plate, value £50, to the Exhibitor of the best pen of 8 Sheep in the Show, to Lord Chesham's Shropshire Wethers.

## THE GENERAL MEETING.

The annual meeting of the members of the Smithfield Club took place on December 10 at the Agricultural Hall, and was well attended. The chair was taken by the President, the Duke of Bedford, who was supported by the Duke of Richmond, the Marquis of Exeter, Lord Chesham, Lord Walsingham, &c.; the following gentlemen, among others, being present:—Sir Brandreth Gibbs (Hon. Sec.), Mr. Charles Howard, Mr. James Howard, Mr. Joseph Druce, Mr. Hugh Gorringe, Mr. F. Jonas, Mr. E. Paddison, Mr. R. Garne, Mr. T. Pope, Mr. J. Hemsley, Mr. Barnett, Mr. E.W. Moore, Mr. H. Overman, Mr. J. Thompson, Mr. J. Treadwell, Mr. Little, &c.

After the usual preliminaries,

THE HONORARY SECRETARY (Sir Brandreth Gibbs) read the Report of the Council, which was as follows:—

The Council begs to lay before the general meeting the annual report of its proceedings during the past year. Five meetings have been held in addition to the ordinary business of the Club and matters connected with the last and present shows. The following subjects have had the careful consideration of the Council:—

I.—The preparation of the prize sheet, and the rules of exhibition for this year's show. The Council at its meeting last February, came to the following decision: That the Council being desirous to throw the show open, and to abolish the special restrictions, rules No. 1 and 2, provided the stock of the country have a clean bill of health, resolved that the same be rescinded, subject to the confirmation of a special Council to be held on the first Tuesday in October, next; viz.:—October 1st.

The rules above referred to are as follows:—

Rule 1.—That no animal (cattle, sheep, or pigs) exhibited at any other show after the 1st November, 1878, be allowed to be exhibited at the Smithfield Club's Show this year.

Rule 2.—That each exhibitor be required to certify that any animal to be sent by him for exhibition at the Smithfield Club's Show this year, has not been, and will not be shown at any other exhibition after the 1st November, 1878.

A meeting was therefore held on the 1st October. The last official returns from different parts of the country, as regards pleuro-pneumonia and foot-and-mouth disease, were laid before the meeting, together with communications from Professor Simonds, the honorary veterinary inspector of the Club, and Professor Brown, the veterinary inspector. After duly considering these returns the Council, much to its regret, did not feel justified in rescinding the special rules for the present year.

The Council also felt that if any contagious or infectious disease should break out in the yard, consumers might object to the meat, and consequently the marketable value of all the animals exhibited might be considerably deteriorated.

The Council trusts, however, that it may be in its power to throw open the show for the coming year, as there can be no doubt that, provided it can be done without the risk of exposing the animals to contagion or infection, the removal of the

restrictions would be a great advantage to the exhibitors, and would materially increase both the number and general excellence of the sent animals to the Club's exhibitions.

For many years the method of adjudicating on the animals for the champion plate has occupied the attention of the Council, and several different plans have been tried, amongst others the following:—

1st.—When there were only 6 judges for cattle, the whole adjudicated on the champion plate; this however was not satisfactory, and more than once resulted in an umpire having to be called in.

2nd.—The number of judges was increased to 9, and the whole of these decided by a majority of votes. This, however, was not deemed satisfactory.

3rd.—The 9 judges selected 3 out of their own number to act, but this method was in its turn rejected, and last year the whole of the 9 again adjudicated.

The Council, after considerable discussion and consideration, determined that on the present occasion the judges selection committee should appoint 3 selected by them out of those judges who act for cattle and sheep respectively.

It may here be observed that the judges committee consists of the 6 stewards of Live Stock, and such of the 8 senior members of the Council in each year as shall not be exhibitor at ensuing exhibition.

The Council thinks that the plan adopted this year has so far proved satisfactory. The Council decided that the £50 cups for the best heifer or cow shall be decided in the same manner, and also the champion plate for sheep. The ages for the steer classes in the Devon, Hereford, Shorthorn, and Sussex cattle have been altered from a maximum of 3 and 5 months to 3 years and 6, and the prizes for Sussex cattle (of which a considerable number have been shown annually) have been raised to the same amounts in each class as are offered for Devons, Herefords, and Shorthorns. A special breed cup for the best pen of Cheviot or other mountain sheep has been given.

II.—The prizes in the lamb classes have been increased.

The Council have appointed a committee to confer with the Agricultural Hall Company, with a view of ascertaining if any additional space can be obtained for the exhibition of implements; but it is found that at present this is impracticable.

III.—The Council has in accordance with the Bye Laws, prepared as usual the list of 16 members of the Club, from whom it recommends 8 for election on the Council, to succeed the 8 who retire by rotation, and are not re-eligible for one year.

The Scrutineers' report of those elected to serve on the Council will be presented before the close of the general meeting.

IV.—The Council lays before the general meeting the usual printed balance sheet up to December, 1st inst. Showing:—

Balance in hand amounting to £3,444 Os. 7½d. Of this however £788 5s. belongs to the Life Composition account.

In addition to the above, the Club has to receive £1,355 from the Agricultural Hall Company, Limited, for this year's exhibition.

Against those amounts there will be, as usual, the payment of prizes and other expenses connected with the present show.

The total amount offered in prizes and cups is as follows:—

	£	s.	d.
Cattle .....	1,320	0	0
Sheep .....	755	0	0
Pigs .....	192	0	0
Champion and other plates	745	0	0
Total	3,012	0	0

The invested funds amount to £4,357 9s. 9d. Stock standing in the 3 per cent. Consols.

V.—The Council regret that (in consequence of severe illness) the Assistant Secretary, who has not been enabled to attend to the office work during the preparations for the present show, the Council therefore authorised arrangements being made for such temporary assistance as might be necessary, and in order that the business of the Club might be transacted with the usual punctuality and exactness, the whole of the details have been carried out under the constant personal supervision of the Honorary Secretary.

The Council whilst again able to congratulate the members on the general prosperity of the Club, begs again to impress

on them the advisability of their inducing their friends to join and thus enable the objects of the Club to be extended even further than they are at the present time.

By Order of the Council,

(Signed) B. T. BRANDRETH GIBBS,  
Honorary Secretary.

The Balance Sheet was also presented.

The CHAIRMAN having moved the adoption of the Report, Mr. CROSSKILL said he wished to know whether the number of members had increased or diminished during the last twelve months.

Sir BRANDRETH GIBBS said he could hardly answer that question. He had not received notice that it would be put; otherwise he would have been prepared with a reply.

The motion was then adopted.

On the question of the election of officers for the ensuing year,

Sir BRANDRETH GIBBS said it would be remembered that at the last meeting, the Duke of Sutherland was elected President for 1879. He was sorry to say that he had that morning received a communication from Col. Kingscote to the effect that his Grace would not be in England at the time of their meeting, and, therefore, would not be able to act.

The Duke of RICHMOND then proposed that Col. Kingscote should be the President for the ensuing year.

Mr. TRASK said he felt great pleasure in seconding that motion, Col. Kingscote being a good man and a good farmer. The motion was then adopted.

On the motion of Lord Walsingham, seconded by the Marquis of Exeter, Lord Treregar was elected President for 1880.

Mr. F. STREET moved the re-election of the Vice-presidents, and the addition to the list of the names of the Duke of Manchester, and the Earl of Ellenmore.

The motion having been put and carried,

Mr. JOSEPH DRUCE proposed that Sir Brandreth Gibbs, who he observed was one of the oldest members, should also be added to the number of Vice-presidents (cheers). He also made a similar proposal with regard to the Earl of Jersey.

Both motions were agreed to.

On the motion of Mr. Crosskill the trustees were re-elected.

Mr. E. W. MOORE said he had the greatest possible satisfaction in proposing that their Honorary Secretary should be re-elected (cheers). That gentleman had been for many years a member of that Club, which they all knew was much indebted to him; and he was sure they would all heartily congratulate him on the well-deserved honour which had recently been bestowed upon him (loud cheers). The Smithfield Club could scarcely be regarded as complete without Sir Brandreth Gibbs as its Honorary Secretary (cheers).

Mr. FOOKES having seconded the motion it was carried by acclamation.

Sir BRANDRETH GIBBS, who rose amid cheers, said—My Lord Duke and gentlemen, I have never detained you before beyond uttering a single sentence or two in returning thanks for the honour you have done me in re-electing me Honorary Secretary. On the present occasion, however, I think I ought to say one or two words more, because it has a sort of speciality attaching to it. I have always felt it a very great honour to hold the post which you have again conferred upon me, and it is an additional honour you have done me in kindly electing me a Vice-president of the Club of which I am now the oldest member (cheers). Those of you who have ever read a little pamphlet which I issued some years ago, containing a history of the Smithfield Club, will recollect that when the Club was first founded and established a Francis Duke of Bedford occupied the chair. At that time the Woburn experiments were going on, and they were continued for some time. On that occasion, also, a very celebrated man was elected your Honorary Secretary—I mean Arthur Young (hear, hear). At this moment we have again the pleasure of seeing a Francis Duke of Bedford occupying the chair of the Club, and again the Woburn experiments, which I expect will be of great practical value to agriculture and the country, are going on. But here comes a distinction—instead of electing a man like the late Arthur Young to be your Secretary, you are electing one whose only claim upon your kindness and consideration is that he has always done his best to promote the welfare of the Club (loud cheers).

The scrutineers reported the election of the following members of the Council, in the place of those who retired by rotation:—Mr. Henry Overman, Mr. John Trendwell, Mr. H. Gorrington, Mr. John Hornsby, Mr. Henry Fookes, Mr. A. Crosskill, Mr. F. M. Jones, and Mr. John Brown. The retiring members were Mr. A. F. Milton Drace, Mr. John Ford, Mr. Robert Garner, Mr. John Greenham, Mr. Robert Charles Rawnsme, Mr. Joseph Shuttleworth, and Mr. Henry Trethewey.

The business of the meeting having terminated with the election of several new members,

The Duke of RICHMOND said—Gentlemen, I must take the sense of the meeting as to whether before parting we ought not to offer our best thanks to the Duke of Bedford, not only for his conduct in the chair to-day, but also for his conduct as President of the Club during the past year (cheers). I am sure we all share with our Honorary Secretary, Sir Brandreth Gibbs, the feeling of satisfaction that this Club has in the last twelvemonth had the same name attached to the office of President that was borne by the nobleman who originated the Club many years ago (cheers). This shows that that family, like many others, has an hereditary interest in the agriculture of this country; and I do not think agriculture will suffer much so long as so much attention is paid to it, and so much interest taken in its affairs by persons like my noble friend who is now the President of this Club (cheers). I beg, gentlemen, to move that the thanks of the Club be given to the Duke of Bedford (cheers).

The motion having been seconded and cordially adopted,

The Duke of BEDFORD said—Gentlemen, I beg to return you my most grateful thanks for the high honour which you have done me in allowing me to occupy the chair during the past year. I confess that it was an object of ambition with me to occupy a chair which was occupied by the first President, who early in life, and early amongst his contemporaries, discerned that the interests of agriculture were not only the first interests in the country, but the soundest and best that could be promoted, and that it was the duty of all landlords to make themselves acquainted with the requirements of agriculture, and, having made themselves acquainted with them, to promote them to the utmost of their power (cheers).

The meeting then separated.

## SMITHFIELD CHRISTMAS CATTLE MARKET.

The usual annual market for the sale of fat stock for Christmas consumption was held on Dec. 16 at Finsbury, and, as we were led to expect, has proved a fair success. At the Agricultural Hall this year the Show was undoubtedly a good representation of what the cattle-rearing interests of this country are capable of; but as we are so accustomed to seeing a choice display of prize stock at these shows no surprise was felt at the excellent appearance this year. A retrograde movement is not likely to occur on our side when it is considered that foreign competition is steadily increasing, and that we have therefore to strain every nerve and make the most strenuous exertions to keep the first place in the race. The degree of excellence to which we have already attained must not be allowed to pass as an excuse for us to rest on our laurels or indeed to pause in our effort to attain a still higher standard of efficiency. How to provide for the growing requirements of the increasing population of the United Kingdom is one of those social problems, the solution of which must not be delayed or in any way overlooked. Next to cheap bread cheap meat is the prime necessity, and it is for our graziers and breeders to so employ their capital and utilise the means at their disposal that they may continue to command the bulk of the trade. It is an old axiom that the consumption of articles of paramount necessity augments in a corresponding ratio to the reduction in the cost of its production, and consequently to the easier terms on which it is offered to the public. So long as animal food is anything like cheap its consumption by the laboring class can hardly fail to become greater; but if its value be unduly enhanced but one result will inevitably follow—namely, the demand will be curtailed.

Both in point of number and quality the market to-day was fairly supplied. All the best breeds were well represented.

It would, indeed, be a bad sign were they not, as the choicest animals are, as a rule, kept back to be forwarded on this special occasion. The past season it must be borne in mind has been exceptionally favourable. Throughout there was an abundance of food. The hay crop was unusually heavy, and in most districts a good aftermath was secured. In addition the condition of the pastures has enabled graziers to keep cattle on the grass unusually late. At the present moment the best hay does not reach its value of this time last year by about 20s., whilst choice clover is some 30s. per load cheaper. Roots and feeding stuffs generally also have been had on easy terms. These are important points to take into consideration when estimating the results of the year's working. Basing our expectations on these facts, and on the large proportion of choice stock offered at the bi-weekly markets, we anticipated a good display to-day and it is satisfactory to know that we have not been disappointed, but that our expectations have been, to a large extent, realised. The Christmas market is an event quite as important as the annual Show at the Agricultural Hall. There, of course, only the choicest specimens are exhibited, but at the market we have the contents of the yards, and whilst in the one case only isolated and picked animals are offered, in the other, by an examination of a number, we are in a position to strike an average, and thus form a more accurate judgment of the merits and advantages of each breeder. In some seasons the scarcity of fodder had compelled graziers to dispose of their stock early, and in a half-fat state, but on occasions this year have not been such as to render this necessary. We have therefore had full yards to draw upon, and have been well supplied in consequence. To those who remember the Christmas market some dozen or so years ago, and who consider the enormous growth of the metropolis in the interim, it may at first glance appear a matter for surprise that no great increase has occurred in the numbers offered, or indeed that they should barely remain stationary, but they must make an allowance for the extraordinary development which the dead meat trade has undergone of late years. Many graziers in the North who formerly contributed very freely now send but sparingly. By some it is maintained that as good a market is offered in their neighbourhood as in London. Hides, also, have been fetching full prices in the North, and the result has been that whereas years ago nearly the whole of the supply from the North was despatched alive, it is now by many considered better to send it in the shape of dead meat, hence, whilst the live trade has scarcely remained stationary, the growing wants of London have been met out of the vast extension which has occurred in its sister branch at Smithfield.

The market afforded another illustration of the familiar endeavours to do away as much as possible with heavy cross-grained stock, and substitute in its stead the smaller animal. Experience has proved that the latter is the more remunerative in the long run, and makes a higher return to the producer, as the quality generally is better, and the stock therefore more readily saleable. Continued judicious crossing must eventually bring about the desired end, and year by year we may confidently look for an improvement in the quality of our meat. Examples of some of our best strains have long ago been purchased by foreigners for breeding purposes, and it is therefore very evident that caterers abroad for the English market are not likely to abate in their efforts to compete with us on more equal terms.

It was in 1876 that American stock first arrived in anything like numbers in the English markets. With the knowledge of what the United States had done, and are still doing in the grain trade and fully cognisant of the enterprising character of the people, we ventured to predict that the then novel idea of supplying us with live stock was not likely to languish so long as it could be made remunerative. The result has more than equalled our expectations. America has now secured a firm hold on our market, and it would belie the national character for energy and shrewdness were she to relinquish her position so long as a profitable return can be realised. It is much more probable that this branch of the trade will increase, and henceforth America will become a yet more important factor. The show of American stock to-day was not, however, so large as was looked for, only about 400 head having come to hand, and there was nothing special to notice in their quality or condition.

The Scotch supply as usual forms the most attractive portion of the show. The number is hardly up to last year, but the quality and condition have again been excellent; in fact, taken altogether, this portion of the market was a marked success. There was a good show of cross-bred stock, and a fair display of Devons and Herefords. Nominally speaking Ireland was well represented, but plenty of room for improvement both in quantity and condition was apparent.

The foreign side of the market was not well stocked. In addition to the Americans above mentioned, there were a few Danish, which did not call for any particular remarks. About 300 Beasts were delivered at Deptford.

The following shows the number of stock exhibited and the prices realised at the annual markets held since 1844:—

Beasts					Prices.					Beasts					Prices.				
Year.	shown.	s.	d.	s.	d.	Year.	shown.	s.	d.	s.	d.	Year.	shown.	s.	d.	s.	d.		
1844	5713	4	0	6		1862	8430	3	4	0	5	0							
1845	5326	3	6	4	8	1863	10370	3	0	5	2								
1846	4570	5	0	5	8	1864	7130	3	8	5	8								
1847	4282	3	4	4	8	1865	7590	3	4	5	4								
1848	5912	3	4	4	8	1866	7810	3	8	5	6								
1849	5705	3	4	4	6	1867	8110	3	4	5	0								
1850	6341	3	0	3	10	1868	8320	3	4	5	8								
1851	6103	2	8	4	2	1869	6728	3	6	2	3								
1852	6271	2	8	4	6	1870	6125	3	6	2	3								
1853	7337	3	2	4	10	1871	6320	3	10	6	3								
1854	6181	3	6	5	4	1872	7560	3	8	6	0								
1855	7000	3	8	4	2	1873	6710	4	4	6	6								
1856	6748	3	4	5	0	1874	6590	4	4	6	8								
1857	6856	3	4	4	8	1875	7660	4	6	6	6								
1858	6421	3	4	5	0	1876	7020	4	4	6	4								
1859	7560	3	0	5	4	1877	7610	4	6	6	0								
1860	7860	3	4	5	4	1878	6830	4	6	6	0								
1861	8340	3	4	5	0														

Annexed are the particulars of some of the best portions of the morning's market:—

Mr. George Dickson had 450 Scotch fed beasts of excellent qualities forwarded from the counties of Aberdeen and Banff. The principal consignments from Aberdeenshire were from Messrs. A. Beddie, Strachan; John Morrison, Tariff; Wm. Wallace, Auchtermless; James Lawson, Huntly; Tait and Son, Inverarie; John Frost, Monymusk; G. Paterson, Whitehouse; Alfred A. Bruce Mantlaw, Captain Mitchell, Forera; and Wishart, Buckner, Laing, M'Tosh and others of Aberdeen. The receipts from Banffshire were from Messrs. Milne, Pire, Bartle, & Co. of Banff, Longmore, Kettie, Wm. Hay, Patsy, James Hay, Cullen and others.

At the stand of Messrs. Hicks and Son were over 600 head.

Amongst the senders were Messrs. J. and W. and W. Martin, of Aberdeen, Wm. Wallace, Chapel of Leggart; A. Beddie, Strachan; Geo. Wilson, Milton, of Nott.; J. Macdonald, J. Davidson, Jas. Bruce, Jas. Booth, Peterhead; A. Longmore, Banff; Burnett & Pire, Milne, Banff; W. Hay Portsoy. There were besides 50 Herefords from S. Thompsons, E-q., Leekhamstead.

At Mr. Biddrell's stand was a large show of choice stock from the best breeders.

At the stand of Messrs. Gillett and Sons was a choice show of Scotch beasts. There were about 50 from Wm. Mc Conchie, Esq., besides receipts from such well known breeders as H. Adamson, Alford; E. H. Harris, Forres; A. Neame Huntly. There were also about 50 American.

Mr. Alfred Welch had for sale some choice Scots and Herefords forwarded by S. Thompsons, Esq., and Weekes, of Torbay; T. C. Howland, L. Carwardine, and T. Davies.

The stand of Messrs. Duckworth was well stocked with choice Herefords, &c.

Messrs. Maydwell and Hoyland had for sale some good stock, forwarded by G. Copeman and Co., Dulham Lodge, Norfolk.

The other portions of the show were equally good, but the space at our disposal is too small to allow us to deal with them.

The supply of beef was hardly so large as last year, but the quality and condition were good. Some pens were of marked excellence. Messrs. Lintod and Sons had some fine sheep from Colonel Bartlett, of Sussex, and some good Hampshire from Messrs. Langford, and a few fine specimens from L. Sanders, Dorchester.

## STATE OF THE TRADE.

A dull tone has prevailed. Beasts have been difficult to move. Occasionally 6s. was realised, but it was quite exceptional, and must not be taken as the current quotation. The general top price was 5s. 6d. to 5s. 8d. per 8 lb. and even at the quotations business was very sluggish. Many really fine animals have gone off at a very low figure.

As regards Sheep business progressed very slowly, and as in the case of Beasts the tendency was towards weakness. The best Downs and half-breeds were disposed of at 6s. 10d. to 7s. per 5 lb.

Culvers were quiet of sale at about late rates, Pigs dull, and unaltered.

At Deptford were about 300 Beasts and about 6,000 Sheep

## CLOSE OF THE MARKET.

The market closed flat at about the opening prices.

From Scotland we received about 2,000, Ireland 700, Norfolk, Suffolk, and Essex 500, Midland and Home Counties 2,650, Western Counties 333.

## EDINBURGH FAT STOCK SHOW.

The twelfth annual exhibition of fat stock, sheep, as well as of poultry and fowls, in connection with the Edinburgh Christmas Club, was held in New Burnley Market, Edinburgh, on December 11 and the two succeeding days. Notwithstanding the general depression of trade in the kingdom, and the commercial excitement in the North, caused by the recent enormous failures there, the show was quite a success—not so much, however, in respect to the number of entries over the whole show, as to the character of the stock exhibited. There was, no doubt, in the cattle classes, a number of very mediocre animals, but those above mediocrity and those of really superior style and quality were as numerous as on former occasions. Sheep were not such a large display, nor could we say that in every instance the prize-winning style and quality were up to what we have seen here before. The Barneyman's Cheviots, which are generally of great size and vigour of constitution, and have abundance of wool, were conspicuous by their absence. Pigs were very deficient in numbers, but then the breeding and quality were remarkably good. The past season having been a splendid one for growing roots, there was a large and magnificent display in this department—indeed, there has seldom been a better. The poultry display formed as prominent a feature of the exhibition as ever. The following are the entries, along with those of last year, which will show that in the total there is a decrease, which has taken place principally in the sheep and poultry departments:—Cattle, entries for 1877, 101; sheep (animals), 175; pigs (pens), 14; roots, 164; poultry, 1,380; total, 1,834. The cattle entries for 1878, 101; sheep (animals), 140; pigs (pens), 7; roots, 142; poultry, 1,330; making a total of 1,723. It has to be noted in connection with the slight decrease in the cattle entries that it arises solely from there being more pairs of cattle than last year taken into account as single entries. The show was well attended by the public during the three days it was open, but it is not expected that in these dull times so much money as that of last year will be drawn at the gates. According to custom the magistrates and town council formally opened the exhibition, and Bailie Cranstoun, who spoke in the absence of the Lord Provost, made felicitous reference to the late Mr. John Swan, cattle salesman, Edinburgh, who was the originator of these Christmas shows in that city about twelve years ago, and congratulated the members of the Club on its prosperity as far as its shows were concerned.

Proceeding to make an inspection first of the cattle exhibited, we find that the Shorthorn young ox class

only contains four animals, and is headed by a deep-carcased, stylish, wealthy roan, two years and nine months old, belonging to Mr. Jas. T. Smith, Daloch, Inverkeithing, who is followed by Mr. C. Alexander, Easter Knowe, with a roan three months younger, possessing better hind-quarters, but wanting in the general style and substance of its rival. Mr. Robert Scott, of Philiphaugh, a well-known and successful breeder on the other side of the Tweed, only secures third honour with a large, massive animal, a month older than the first prize one, but flattish on the ribs, and not in high feeding condition. With a three year and eight months old lengthy, firmly-touching, deep roan, Mr. Scott, Philiphaugh, takes deservedly the first honour in the aged Shorthorn ox class, in which stands second and third Messrs. John Bell and Sons, Glasgow, with two large, substantial oxen, but with rather too much bone to catch the butcher's eye. The young cross oxen were a good class, in which came first a red and white, two years and eight months old, of fine quality, splendid touch, wealthy, thick frame, but not so well covered all over on the back, bred by the Duke of Sutherland, and belonging to Mr. Lawson Brown. This fine ox also took Messrs. Swan's cup for the best male animal in the yard, but of this competition we shall speak more in detail hereafter. Second and third to Mr. Lawson's ox stood Mr. Elliot's, of Hindhope, two greys, which were not large, but fleshy, and finely textured, and symmetrical. Mr. Lawson also got a commended, and Lord Lovat a highly commended, for two shapely beasts. The old cross ox class was not a large one, only seven animals being in it, and here Lord Lovat's Birmingham champion pulled ox, four years and nine months old, with remarkable thickness and wealth of flesh all over. It stands low on its legs, touches splendidly, and for weight—it is 25 cwt.—symmetry, and maturity it is, perhaps, the most attractive animal in the yard. Still, however, the judges considered a long while before they gave it the premier honour in preference to the roan belonging to Mr. William Merson, Craigcoillin, Huntly, which was a year younger than its more fleshy rival, but had many fine points to recommend it, such as grand loin and rib, and rare style. One of three judges was warmly in its favour, but of course he had to give in to the other two. Lord Lovat's ox, it may be mentioned, took two £100 prizes and a £15 prize at Birmingham, and was also first this year at some of the northern Scotch fat shows. There were no polled cattle in their class proper exhibited on this occasion. Mr. McCombie, Tillyfour, had two entries in the catalogue, but his animals, which had been taken south for exhibition, were not forwarded here, so that divested the exhibition of one of its good features. The Highland cattle were a small though a good lot, at the top of which was deservedly placed the Earl of Lenfield's sweet and stylish dun, four years and seven months old, which took the first honour at the Highland Society's show at Dumfries, and also at Inverness this year. He was the admiration of all, being a rare specimen of that shaggy breed. A thick, substantial, though less stylish animal from Mr. C. S. Home, Drummond Murray, was placed second, while another of four sent from the same place secured the third ticket.

The heifers formed a large and attractive class. Those not exceeding three years of age were headed by Mr. Merson's firmly-touching, shapely grey of two years and eight months, while Mr. Elliot, of Hindhope, was successful in securing the next two tickets with a pair of massive, well-fed animals. Mr. Allan, of Billie Muir-Ayton, got first honour in the aged heifers with a roan and white of great wealth of flesh, remarkably broad boned, splendid bosom, but with only a middling back and tail head. This heifer was second in the younger class last



year, and got here at a subsequent stage of the judging the special prize for the best female animal in the yard, between which heifer and that of Mr. Merson there was a stiff tussle for that prize. The second honour for the aged heifer was awarded to the Duke of Buccleuch for an animal of fair quality and style, while the third ticket went deservedly to Messrs. A. and A. Mitchell, Alloa. Mr. McCombie, Easter Skene, got first prize for two plump, well-bred bullocks, while Mr. Allan merited and got the second for a couple of shapely ones.

The cows were a large class, and included some very fine animals indeed. Hon. Billie Hamilton's first cow (of any cross or breed) is long, broadly-loined, and very stylish, while Mr. Thos. Ray, Ballendrish, Bridge of Earn, and Mr. A. Lillie, Earlsdon, got the next two tickets. In the fat dairy cow class (Shorthorn or any cross breed) Mr. Balfour Crichton, Parkhouse, Fife, got first with a handsome animal, which also carried away Mr. Burst's cup, and the Dairywomen's cup for the best cow in the yard. Mr. White, Edinburgh, got second, with a good, useful, white. In the Ayrshire cows Mr. Wm. Colthart, Edinburgh, was first with a sweet, stylish cow, which also carried away Mr. Burst's medal, also Begbie, Edinburgh, worthily got second.

There was considerable delay before the judges could make up their minds as to which animal they should award Messrs. Swan's cup for the best male animal in the yard. The two sets of judges—those for the heifers and bullocks, and for the cows—were the adjudicators of the cup. Three of them were of opinion that Mr. Merson's aged cross ox, which stood second to that of Lord Lovat, should be brought into the ring for the cup along with the first prize animals in each section, and the point in dispute was remitted to the committee, who decided that the usual course should be followed—namely, that the first prize animals only of each section should be taken out, and thus Mr. Merson's ox was allowed to remain in its stall. It was thought to have a good chance of the cup. These judges referred to asked out Mr. Merson's ox for the reason that it had made a stiff second to what was then considered the best animal in the yard—Lord Lovat's, but this latter animal, in the opinion of some, was too highly fed, while the regulation of the club stated that the aim of the promoters of the exhibition was to encourage profitable and not excessive feeding. As we stated above, however, the cup does not go to Lord Lovat's animal, but to one in a much younger class—namely, Mr. Lawson's white and roan.

As we have stated, the sheep were a small but a fine display. In the young Cheviot wedder class Mr. Thomas Irving, Ballenerieff, Drew, was first with well-wooled, stylish, large sheep, and with equal success took the first honour in the old wedder class. Mr. White Spott, Kirriemuir, was awarded the first ticket in the black-faced wedders, with age considered, Mr. Muller, Perth, coming second, while in the cross breeds Mr. Thos. Irving and Mr. John Mickle, Ayton, came to the front with large-sized, shapely sheep with fine coats. Mr. Andrew Leslie, Royal Asylum, Edinburgh, carried away most of the prizes for pigs with well bred and fed animals.

#### SALES OF STOCK.

As was to have been expected, the demand for fat stock was limited, and prices low. Compared with last year, the prices show a decline of from 15 to 20 per cent., while for over-fed animals there was hardly any demand.

(We have not any space for prize list.)

### ROYAL DUBLIN SOCIETY.

#### WINTER SHOW.

The winter show of fat stock held by the Royal Dublin Society commenced on the 10th ult. and closed on

the evening of the 18th ult. The entries were more numerous, and the quality of the stock generally was better than usual. The house-fed cattle take precedence and of these the more notable beasts were Mr. J. J. Naper's prize two-year-old ox, the first prize Hereford cow, belonging to the same gentleman, and Mr. Patric Bill's four-year-old heifer. These were, without exception, very superior beasts, and the other prize cattle, as well as many not distinguished by the judges, were of useful class for butcher and consumer.

The prizes awarded at Dublin for out-fed cattle were instituted to meet the case of a number of graziers who finish on grass without housing their cattle. For some years the out-fed beasts at these shows were but a small lot, but of late graziers have found out the advantage of giving artificial food to their cattle, especially in the latter part of the grazing season. Some of the out-fed oxen exhibited last week at Dublin appear, from the statement of feeding given in the entries, to have got as much as 14 lb. per day of linseed-cake and Indian meal. Major Kearney was in the aged class of oxen, two-year-old, with a pair of thoroughly good three-year-old Hereford bullocks. Out-fed cows and heifers were both good, particularly the latter, in which the prizes were awarded to Mr. O'Connell Murphy and Mr. Richard Walsh. In the sections comprising single out-fed beasts Mr. Kearney took the first prize with an excellent Hereford ox—a mass of first-rate beef. The heifers were remarkably good, and Mr. Leonard took first and second prize in the section, the heifer which got the second or being better than the first. Major Kearney's very highly commended heifer was, it was said, disqualified from getting a money prize in consequence of being too fat. She was certainly finished in great perfection. A pair of highly-bred Hereford cows, exhibited by Mr. Stirling, were very highly commended. They handled a little soft, otherwise we considered them superior to the first and second-prize cows in the section.

Of the three sections of long-wooled sheep the best lot was Mr. Walsh's pen of five shearing wethers: at the same time the other entries were of a very useful description. In the short-wooled classes Mr. Naper's pens of shearing Shropshire wethers were remarkable for their excellence, and it is doubtful if a better pen than that of first-prize lot of five have been exhibited at any show of the year. They were estimated to weigh (dead) about 57 lb. per quarter. Mr. Hamilton had a capital pen of well-bred and well-finished Shropshire ewes, which got the first prize. The sections of Roscommon sheep were filled with ordinary Ballinasloe wedders, and presented a feature calling for special remark.

There were but few pigs, the best being Mr. Naper's small Yorkshire pig, eighteen months old. The Guardians of the North Dublin Union showed their excellent pen which had been fed upon the offal of the workhouse. These pigs were a cross of the large Yorkshire and large Irish pig, and possessed more quality than ordinary Irish.

The show of poultry was large, and the Dorkings and Brahmas were very good.

The department occupied by cereals, roots, &c., was so well filled as usual; but the quality of the various classes exhibited was much better than was expected. People have got tired of the monster roots run upon in former years, having found that large roots are a great mistake respect to their feeding value compared with smaller, more compact roots.

A heavy snowstorm was against persons attending the show.

(We are unable to give the prize list.)

## YORKSHIRE FAT STOCK SHOW.

On December 3 the twenty-second annual show of the Yorkshire Society for the Christmas exhibition of stock, poultry, and roots, was opened at York. The arrangements were much the same as those of former years, but there was a slight falling off in the entries. They were as follows:—Cattle 91, sheep 48, pigs 36, poultry 416, roots 90, rabbits 13, pigeons 127, butter 61, dressed geese 26, stand-for-seeds, &c. 16; total 1,013. For the purposes of comparison, it may be stated that the entries for last year were 1,168, of cattle 97, sheep 45, pigs 61, bulls 13, poultry 422, pigeons 23, rabbits 143, roots 118, and butter 86. The falling-off which is thus visible—though mainly in the more unimportant classes—is doubtless the result of the similar exhibition at Leeds. The judging commenced at a little after ten in the morning, and progressed with such rapidity that the show-yard was open to the public by one in the afternoon. Then it was generally seen that in the quality of the entries the show was fully equal to those of past years, and that the success of the exhibition in this respect was beyond doubt. The result may be mainly attributable to the liberal prize-list which the committee had issued, and the total value of which was about £100. The special prizes were as numerous as usual, and included a £25 cup, given by Lord Leconfield, the President of the Society; a £20 piece of plate, given by the Corporation of York; and other pieces of plate, given by the Sheriff (Ald. B. Herby), the tradesmen of York, the York Road retailers, the late Mr. Joo. Roper, and others. Among the principal exhibitors were the Duke of Sutherland, the Earl of Faversham, the Earl of Zetland, the Earl of Hereford, Lord Levat, Sir W. C. Trevelyan, Bart., Lord Romney and Stourton, Sir G. O. Wombwell, Bart., the Earl of Durham, the Hon. E. Lascelles, Major Stappinon, and most of the principal breeders and feeders in the north of England and Scotland. The show-yard was, as usual, tastefully decorated, and the attendance exceedingly large.—*Leeds Mercury*.

## THE CANTERBURY CATTLE SHOW.

The cattle show was opened on December 13, the entries being as nearly as possible the same in number as those of last year. There are several exhibitors who make their appearance at the show for the first time, notably some reputed breeders and feeders of stock in the sister county of Sussex. There are no exhibits of superlative merit, about which connoisseurs will men who have to do with farm animals speak with enthusiastic praise, but at the same time it cannot be denied that a very large proportion of the cattle possess marked excellence, and are equally objects of admiring interest to the breeder, the feeder, the butcher, and the general public.

In the catalogue the first place was given to the Shorthorn class, which, although a good one, was by no means so numerous, and was also somewhat under the average quality of previous exhibitions, notably the earlier ones. The Short-horn class was a much more numerous one than the Shorthorn, and the steers under three years were uncommonly well represented. The open class was of an uneven character. The sheep exhibited were numerous, pigs were few in number, and roots were a fair collection. The champion beast in the show was a steer, the property of Mr. B. W. Tasse, of Patricobourne, having gained no less than five cups, and a £6 premium, representing in all £73 8s. The animal is a pure-bred Devon, although small is wonderfully well made. Although not of gigantic frame it is finely and compactly built. Its weight as reported at 130 stones.—*South Eastern Gazette*.

## LEWES FAT STOCK SHOW.

The last of the season's fat stock shows for this country was held on Dec. 17 at Lewes. On the whole the show was generally admitted to be the best seen in the old county since 1860. The general public were admitted immediately the gates had concluded their labours, about noon, and an inspection showed that this year there was an unanimity as to the best animal. For two years previously it has been remarked as somewhat peculiar that the judges at Hailsham and Lewes have reversed each other's decisions, for while at the first-named show Captain Taylor has been on both occasions awarded champion honours at Lewes, he has had to be

content with second position, the second beast at Hailsham being placed first at Lewes. This year, however, the hand some Sussex steer exhibited by the Captain has been placed first at both competitions, its splendid quality, true symmetry, and extraordinary growth carrying it far above other competitors. In class 1, Mr. William Verrall exhibited two splendid Sussex oxen, winning both prizes, but by the conditions taking first at only—the second reverting to the funds. Next to the Champion Prize animal of Captain Taylor's, which also took first prize in its class, came, for quality and general beauty, the six heifers exhibited by Messrs E and A. Stamford, of Ashurst, and the Shorthorn heifer shown by Mr. F. Barchard, of Horsted Place, while as a selection of animals, Mr. Theophilus Page, of Ringmer, exhibited three Sussex heifers of superb quality, each of which would have stood well for single competition. There were, unfortunately, but few sheep in the show, but those sent were exceedingly good, and the lambs of Mr. C. Ellis, of Beddingham, were almost equal in size to many four-tooth animals, and amply proved what could be done with this class of sheep when well selected and properly fed, giving as they did the acknowledged desideratum of the greatest possible weight to age. In the pigs, competition was very poor, these animals evidently finding less favour among agriculturists year by year.—*Sussex Daily News*.

## BARNSTAPLE AND NORTH DEVON CATTLE SHOW.

The first show of fat cattle that has ever been held in North Devon was opened on Dec. 18 in the Market Place, Barnstaple, under most auspicious circumstances, and afforded every encouragement to the promoters to make the Fat Stock Show an annual event.

The show of cattle, especially in the classes for Devons, was exceedingly good. In these classes there were no fewer than thirty-two entries, and the stock exhibited included some beasts of excellent quality. In sheep there was not a large show, but the exhibits comprised some really excellent stock. There were only three classes of pigs exhibited. In the small black breed, in the class for the best pig any age, there was considerable competition, and the quality of the exhibits was so excellent that the whole class was commended.—*North Devon Herald*.

**A HINT TO MOTHERS.**—In an article headed "Starvation in the Nursery," the *Lancet* calls attention to what it says is a fact established by daily experience: that large numbers of persons occupying decent positions in society systematically starve their children in respect of that article of food which is the most essential to their nutrition. Even to very young and fast-growing children they give cocoa with water, and not always even a teaspoonful of milk, corn flour with water just clouded with milk, tea, oatmeal, baked-flour, all sorts of materials, indeed, as vehicles of milk, but so very lightly laden with it that the term is a sham. The consequence of this misplaced economy is that there are thousands of households in which the children are pale, slight, unwholesome looking, and, as their parents say in something like a tone of remonstrance, "always delicate." Ignorance, no doubt, is often the cause. The parents do not know that, supposing there were no reason, their wisest economy is to let their growing young ones have their unstinted fill of milk, even though the dairyman's bill be nearly as much as the wine merchant's in the course of the week. But in many (the medical paper is of opinion) the stint is a simple measure, a pitiful economy in respect of the which, it is supposed will not be open to the criticism of observant friends.

**A FINE DIGESTION.**—Artemus Ward's ostrich has been eclipsed as a digester of unconsidered trifles. The following is a list of the contents of the stomach of a beast slaughtered a few days ago by Mr. John Charles, butcher of Market Rasen:—"Five linen cuffs, six collars, a chemise, portions of other linen, and part of a newspaper containing selections from a lecture recently delivered in the Market Hall by the 'Singing Preacher.'" This combination of a taste for linen and a thirst for knowledge in the intelligent beast is a somewhat remarkable phenomenon. I have hopes now of the intellectual development of the agricultural labourer.—*Sporting and Dramatic News*.

## CENTRAL FARMER'S CLUB.

(Continued from page 18.)

learn from Continental agriculture (Hear, hear). He saw magnificent crops in France, and every bit of land made the most of it. There were no idle corners, and no nests of rubbish here and there. He thought they might live and learn everywhere, and especially was that the case as respected some of the best farming districts in France, Northern Italy, and Belgium (cheers).

Mr. J. J. MCKIN (Tiptree Hall, Kelvedon, Essex) was afraid that they were jumping to the conclusion that British agriculture ought to have something to learn from French agriculture. For many years he had been thrown in the way of French agriculture, and he had the pleasure of knowing M. Léonée Lavergne, one of the greatest stationers in France, who knew more about the comparative merits of English and French agriculture than perhaps any other man in France. Although he (Mr. McKin) was not in Paris at the time of the Exhibition, he had been there many times as a juror, and in other capacities, and he could not forget that M. Lavergne, in his popular book for Frenchmen—"The Rural Economy of England," which had been translated by a Scotchman, Mr. Dudgeon, of Snylaw—had made the remarkable statement that on comparing the land of France with the land of the United Kingdom as a whole, he had found that the agricultural produce of England was exactly double that of France (Hear, hear). That showed that France had a great deal to learn from us. But it was far from his wish to say that we had not also a great deal to learn from France (Hear, hear). In a gainisation and arrangement they altogether excelled us, and they showed a superiority in their pleasure as well as in business. In the actual result of producing food for the people, however, we were in money value actually 100 per cent. in advance of French agriculture (Hear, hear).

Mr. H. M. JENKINS (Royal Agricultural Society, Banover Square) was a little surprised that Mr. Fowler, who was Agriculturally and Exhibitionally so great an "Internationalist," had not found more to admire in the French Exhibition than he had expressed in his paper. It was, of course, a different matter going into an exhibition to go into a country to learn its agriculture. But as regarded the Paris Exhibition, he (Mr. Jenkins) thought that what he termed some of the by-products of the Exhibition were more interesting in the investigation, and more instructive to the agriculturist, than some of the more attractive divisions, such as the exhibition of stock. In some of those side alleys there would be found collections sent from different parts of France which showed the pains taken by the Government and by private institutions to improve the agriculture of the country, and to bring home to the mind of the smallest farmer the best method of cultivating the land and utilising its produce. Of course the object of a farmer was to make money if he could do so (Hear). But the individual result of success might be very different from the national result; and if the French farmer by his methods did the best for himself and his family his individual object was obtained (Hear, hear). It should be remembered in estimating the merits of French stock that the object of the French farmer who bred the stock was not necessarily the same as that of the English breeder of Short-horns. The French farmer had generally something in his mind very different from meat, for he bred either for work or for milk. Meat was in almost every case a secondary object. The breeders of the Charolais cattle, for example, judged them not by the amount of their meat or their perfect squareness of form, but rather as we should judge a cart-horse—that is, by his capacity for work. After keeping a bullock for three years the breeder would sell it for a large price, and all the purchaser cared for was a beast that would do his work and bring him a good price afterwards. And the case was the same with the breeder of dairy cattle. What he wanted was to breed a cow which would produce a large quantity of milk, and he trusted to the skill of his wife to turn that milk into fine butter, or into still finer cheese. The butter the French dairies produced beat our own butter out of the market. He had met with a dairy farmer in France who could bring his books—and such books were, as was stated by Mr. James Howard, admirably kept—to show that he had made his cows produce a gross return of £40 a year each. That was rather a startling fact; but the object of the individual farmer was to get money, and;

if he could get it by his method it was worthy of inquiry whether we could not find something to imitate in his practice. He regretted that Mr. Fowler should not have been able to find, after all his experience of international shows, a little more to admire in French farming. He (Mr. Jenkins) having spent three months of the present year in France, felt that there was a very great deal that was admirable, and some things which were even startling; and he hoped that when the results of his journey were published—as they eventually would be—anybody who wished to criticise them would do so without reserve (Hear, hear).

Mr. CHARLES HOWARD (Biddenham, Bedford), was glad that Mr. Treadwell had made allusion to the show of next year, and that that statement had been remarked upon by Mr. Dent. He thought that every facility should be given to their foreign friends consistently with the safety of English stock, for the exhibition of their animals next year (Hear, hear). He would remind the meeting that their French friends took the English cattle with open arms. There was no quarantine on the other side; and he thought that it would only be a graceful act to treat them as liberally as was possible, consistently with the safety of our own cattle (Hear, hear). As English exhibitors, no man could have been more handsomely treated than they were at the French Exhibition, and that it would be long remembered, not only by them, but by the shepherds and herdsmen. He, like many others, went over to France expecting to find very little to observe and very little to copy. In some respects he was disappointed, but in others he was particularly pleased. The perfection of the arrangements of the showyard had been remarked upon; but that which had not been remarked upon was that the French also knew how to show the animals (Hear, hear). He was thoroughly taken aback by the manner in which their cattle and sheep were shown; and he did not think it possible to exhibit animals in better trim, or to have them better taken care of than was the case with the French animals. He considered that the French beasts presented a good example with regard to the English, for, whilst the French farmer neglected meat, we perhaps went to far in that direction, and neglected that which was the best paying thing on the farm—milk. It was quite possible for our Shorthorn breeders to cultivate milk-producing properties without any loss of the meat-producing properties; and that that remunerative branch of farming ought not to be neglected. With regard to the cultivation of the soil, and the care taken of implements in France, he must say that all the implements he saw were of an antediluvian character, and such as he should not think it worth while to spend money to protect (Laughter). The sooner the French adapted themselves to the English implements the better. As regarded the French farmers, some of the speakers that evening had been spreading their legs under the best tables (Laughter). They did not go to the French farmer proper, but they went to the French proprietors. The French farmers would just suit Mr. Dent (Laughter). For they did all the work themselves, and did all their produce, and what they lived upon no one knew (Laughter). He was sorry that his brother was not so much impressed with what he saw of the accounts kept by French farmers as to follow their example (Laughter). His brother was a dairy farmer, and had a large number of cows; but he (Mr. C. Howard) had yet to learn that the food and produce of each cow was weighed daily (Laughter). The English farmer could not now get a living, and he did not know how they would fare if they had to support half a dozen clerks—(hear, hear)—which keeping such accounts would necessitate in some cases. He was sorry that more English farmers did not pay a visit to the Paris Exhibition. But as to seeing anything extraordinary there in the way of farming he did not see it. He thought Mr. Dent did not look about so critically for weeds in France as he did in England (Laughter). He (Mr. C. Howard) would remind them that our climate was very different to that of France, and that owing to various causes weeds had grown in England much more extensively than the British farmer liked (Hear, hear). Over that matter they had no control. The seasons and other adverse circumstances had been the means of making the land of this country in a more uncleanly state than he ever before remembered it to have been, and he hoped the time might soon arrive when we should see a better state of things in this country than now prevailed (Hear, hear).

Mr. FOWLER, in replying, said that had he touched

length on the subjects alluded to in the discussion his paper would have been of inordinately length. Many of those topics would be sufficient of themselves to form a separate paper, and give rise to a separate discussion. Dairy produce and husbandry was a noising the subjects to which he hoped the committee and the club would be able to devote a night in the coming year. When he said there was nothing to be learnt from French agriculturists, he meant that there was little or nothing startling in their machinery or their herds of cattle. As he said, there was a great deal to learn from the thriftness and cleanliness of the farmers, who in that respect were a pattern to English Farmers. As to the charges for cattle at Bress's Wharf, he meant to say that exhibitors were put to great expense, and that the Government ought to have provided them more cheaply with places for their cattle. The English farmers were charged 5s. for the standing of every head of cattle, and 3s. 6d. per head for the sheep. Thus for a week's standing-room for sheep they had to pay 24s. 6d., and one of the sheep were small mountain sheep, which came to £13. Sir Brandreth Gibbs and himself went to the New Navigation Company and succeeded in getting the charge reduced to 1s. per head. Mr. Naylor bought five little terriers which were not much bigger than Newfoundland dogs. They were placed in quarantine, and he had to pay £53 for these animals. He actually paid more than their value for the landing. Therefore he thought the Government ought to provide standing places for the stock in future. As to the French appreciation of his poultry, at the request of the French Minister of Agriculture, he (Mr. Fowler) received a passport.

Mr. LITTLE moved and Mr. MARTIN seconded a vote of thanks to Mr. Fowler, which was briefly acknowledged.

Mr. JAMES WOOD then proposed and Mr. J. J. MECHI seconded a vote of thanks to the Chairman, which being carried and responded to, the meeting separated.

### THE FARMERS' CLUB DINNER.

The annual dinner of the Farmers' Club was held on December 10 at the Criterion, under the presidency of Mr. J. B. Brown. There was a large attendance, including Mr. Phipps, M.P., Mr. Samuelson, M.P., Mr. Storer, M.P., Captain W. Delf, Mr. Charles Howard, Mr. James Howard, Mr. J. J. Mechi, Mr. J. K. Fowler, Mr. Odams, Mr. L. Street, Mr. G. Street, Mr. William Bve, Mr. Treadwell, Mr. S. B. L. Duce, &c.

The table having been cleared the CHAIRMAN proposed the toast—that of "The Queen" and next "The Prince of Wales and the Rest of the Royal Family." In giving the toast he said that those who saw the Prince of Wales at the Agricultural Show on the previous day must necessarily claim him as one of their number (Hear, hear).

The CHAIRMAN in proposing "The Army, Navy, and Revenue Funds," remarked that they could always be relied upon to defend the Queen, and as the defenders of the liberties and interests of the country.

Captain W. Delf, in responding, observed that recent events had proved that both forces had a moral as well as a physical strength (Hear, hear). When we remembered the great moral effect which the presence of our fleet in the Black Sea at a very critical juncture of this country's affairs, and, more recently, of the sailing of a coloured troops to the Island of Malta when another great Power was supposed to be threatening the interests of this country, he thought it would be admitted that the presence of the fleet and of those troops was sufficient to deter the ambition of an aggressive power (applause).

Mr. CHARLES HOWARD, in giving the health of "The Chairman," spoke of the able manner in which he had presided over the Club meetings during his year of office, and of his integrity, his business habits, and his good common sense. When he first took office as Chairman he held the most important position which any gentleman could receive in this country—namely, that of High Sheriff of Cambridgeshire (Hear, hear). He had unfortunately held office during one of the most adverse seasons that members of the Club had had to contend against. That bad condition of things was partly due to the state of agriculture, but very much more so to the uncomfortable quarters in which the Club was placed (Hear, hear). He was glad to state that they were soon to be in quarters superior to any yet occupied by the Club;

and he, therefore, hoped that its influence would be widely extended. Mr. Brown would be pleased that he was to be succeeded by a gentleman who was well known, and who also held a high position in his county—Mr. Phipps, M.P. (cheers).

The CHAIRMAN said that although he required the inducements of his friends to act as Chairman for the past year, still the duty had been a pleasure to him, and if the interests of the Club had not suffered under his presidency he was amply repaid for what he had done (Hear, hear). It was a great pleasure to him to know that his successor would well sustain the office. He then proposed "Success to the Farmers' Club," and "Thanks to the Members who have read Papers during the Past Year." It was possible, he said, that the gentlemen who did not attend the monthly meetings thought that the only object of the Club was the annual dinner. That was not so; for any matters interesting to agriculture generally were brought before and discussed by the Club, and great attention was paid to measures affecting agriculture, which were passing through the Houses of Parliament. The Farmers' Club was the stepping-stone to the formation of the "English Cart-Horses and Pedigree Association," which emanated from a paper read at a meeting of the Club by Mr. Street (Hear, hear). Another subject taken up by the Club, and entered into conjointly with the Central Chamber, was the Contagious Diseases (Animals) Bill. Together they attended before the Duke of Richmond, and after the expression of their views his Grace was fully convinced that the measure was one required by the country. It was Franklin, he believed, who said "Three removes are as bad as a fire;" but still the question of a removal of their quarters had occupied much of the attention of the Secretary and of the Committee. He thought that the rooms now taken at the Ians of Court Hotel would be pleasing to all; and in addition to being the means of adding to their comfort he hoped it would tend to increase the number of members (Hear, hear). The present number was 600, but, considering the immense interest which was at stake, and the amount of capital employed by the tenant farmers of this country, their numbers certainly ought to be doubled (Hear, hear). The Club was very much indebted to those gentlemen who had volunteered to come forward and read papers. There had been a great improvement in that direction of late; for whereas formerly the papers were long and exhaustive, and left nothing to be said in the discussion, now they were shorter, and the various opinions entertained could be expressed by other persons besides the readers of the papers (Hear, hear).

Mr. J. K. FOWLER, whose name was coupled with the last portion of the toast, said the Farmers' Club exercised very great influence, and that not a silent influence, amongst his brother farmers who looked forward to the action of the Club and the Committee for a great deal of support in many of their troubles (Hear, hear). Last year's papers showed the almost universality of the Club. They began with "Traction Engines" by Mr. Aveling; then they had "Cart Horses" by Mr. Street; then "Farm Work in Harvest" by Mr. Rose; then "The County Government Bill," then "The Need of Greater Unity amongst Farmers;" and lastly, the paper which he had the misfortune to read the previous evening ("No, no"). Those papers showed the great scope which the Club took in looking after the interests of agriculture. With regard to the Contagious Diseases Bill the Government had shown a little consideration for the wishes of the agricultural interest, and had done some justice to their long-needed requirements. He hailed the County Government Bill with satisfaction, and he hoped the Highways Bill would be also for their benefit (Hear, hear). Mr. Fowler then spoke of the representative character of Mr. Phipps, and of his excellent qualifications for the Chairmanship of the Club during the year in which the great International Exhibition was to be held in London.

Mr. SAMUELSON, M.P., proposed "The Royal Agricultural Society of England, the Highland Society of Scotland, and the Royal Agricultural Society of Ireland." He thought that the farmers who could remember the state of agriculture in this country when those Societies commenced their operations must be very unthankful to the promoters of those Societies if they did not express their gratitude to the founders (Hear, hear). Thanks to railways, and other facilities and circumstances, societies of the kind were no longer the absolute necessity they once were; but still, so far as they were carried

on with intelligence, they were at the present day a great service to the cause of agriculture (Hear, hear). Among other illustrations of the progress of those Societies was the International Exhibition which was to be held next year. The Royal Agricultural Society was also making strides in agricultural teaching. Among the most important of these societies was the Farmers' Club. The discussions at its meetings were very instructive, and its influence upon the progress of agriculture was more direct than that of the Agricultural Societies (Hear, hear). There was less of dilettantism in the discussions than in the operations of the societies, and the Club had a more direct action upon the Legislature than it was possible for such societies to exercise (Hear, hear). He remembered attending their November meeting, and telling them, capitalists as they were, that if their wives would look a little more after the dairy and their daughters would pay a little less attention to the piano-forte it would be better for the profession of farming ("Oh! oh!" and laughter). They could not regard that remark of his as anything more than a joke; but still he thought the way that joke was received, and the discussion which was disseminated through the Press, had had a great influence—more than was, perhaps, contemplated at the time. It was impossible to exclude politics from the Club if they wished it to be a real service; for subjects must from time to time crop up before the Legislature in which their interests were directly concerned, and it was necessary that they should watch those matters. He would ask them to excuse his presumption in intending to bring before the House of Commons the question of the Agricultural Holdings Act of 1875; and if they considered the discussion of the subject desirable he hoped they would assist him in making a house when the subject came on (cheers).

Mr. ODAMS, whose name was associated with the toast, said he could bear testimony to the usefulness of the societies and to the business-like way in which they dealt with all questions brought before them. He thought that from those societies Parliament might learn a lesson as to how to keep good hours, have less obstruction, and get home to their families in better time (Hear, hear).

Mr. STROER, M.P., in giving the next toast, that of "The Chairman Elect," said he did not know a more upright, straightforward member of Parliament. His value was recognised in the Central Chamber of Agriculture, where he was always ready and foremost in promoting useful measures for the benefit of the landed and farming interest of the country (Hear, hear). The Club would have full justice done in the year of the International Exhibition by their new Chairman. He could not congratulate the members of the Club on the position of the farming interest, and there were very grave doubts in his mind whether of late agriculture had been at all successful. Various estimates had been made as to its prosperity or otherwise, but he thought there could be but one opinion—namely, that at no time were agricultural affairs in so depressed and so deplorable a condition (Hear, hear). Not only did that apply to the present, but the outlook of the future was not likely to encourage those who had thought deeply on the subject. The hon. gentleman then proceeded to say that he had always been a protectionist. Thirty years ago they were told that they ought to adopt free-trade, and that then every other nation on the earth would follow their example; but what had been the result? (Hear, hear). Foreigners were glad enough to trade with us, but they shut their gates against, or impose a tariff upon, our goods, and when, as now, we saw Russia, Germany, and America, all imposing such heavy duties, how could we call it free-trade? ("Question.") He believed that the Government were desirous of bringing forward measures likely to benefit the farming interest.

Mr. PICKERING PHIPPS, M.P., after heartily thanking the assembly for the cordial reception of his name, said that it was through no action of his own that he had arrived at what he considered to be the proud position he now occupied of Chairman of the Farmers' Club (Hear, hear). It was only within the last few days that he had had the remotest idea that his choice would fall upon himself—a choice which was rather due to their kindness than to his own worthiness ("No, no"). At the same time he could assure them that during the coming year, which was likely to be a year of some importance in connection with agricultural matters in this great metropolis, it should not be his fault if the Club did not perform in a proper manner the functions for which it was created

(cheers). During the evening more than one allusion had been made to the deep and dire distress which prevailed amongst agriculturists. Anyone coming upon the scene and witnessing their dinner, for instance, or the great Show that was being held in the Agricultural Hall would, as a stranger, consider that agricultural distress was the very last thing that existed in this nation. But it had ever been a trait of the British farmer energetically to cope with great difficulties (Hear, hear). In his opinion the manner in which the agricultural interest had coped with the difficulties of the last 20 years was worthy of emulation on the part of those who were engaged in manufactures, and who were now beginning to feel some of the evils which agriculturists had long deplored (Hear, hear). For his own part, he believed that the agricultural interest of this country would be the last to clamour for protection (cheers). It was necessary for the welfare of this nation that common substances obtained from the land should not be taxed (Hear, hear). Referring to his election as Chairman, the hon. gentleman said, besides sympathising to a great extent with agriculturists, he had another branch of business (Hear, hear). That was to him of great importance, as it enabled him to maintain that sympathy with agriculturists which he always hoped to have. On the other hand, it might be that as a Club they wished to express their belief that of agriculturists as a body it was better to have two strings to the bow than only one (Hear, hear). He would say that every agriculturist in the country ought to have some other good business at his back (Hear, hear). For many years he had urged to one of the most serious matters connected with the nation was the fact that the agriculturists of the country who employed more capital in the manufacture of the food of the country than any other single manufacturer in it—that the capital invested in that manufacture should bear so poor a return (Hear, hear). Perhaps there was no one in the whole kingdom who recognised the increase of prosperity to this nation which occurred from a good harvest more than the Chancellor of the Exchequer. There was no doubt whatever, that the greater part of the new capital that was created in this country must come out of agriculture. He (Mr. Phipps) was quite aware that so far as regarded manufactures, if a man turned £100 worth of raw material into £200 worth of manufactured articles he created capital. Therefore he would say that the basis of the new capital of this country rested upon the efforts of the manufacturers, and amongst those manufacturers he would recognise as holding a very high position the manufacturers of corn, and beef, and mutton for the nation at large (cheers). Although for a long series of years great depression had affected the agricultural interest he believed that it might be attributed more to adverse seasons than to anything else (Hear, hear). He did not believe it was possible to legislate against, or to provide any brand new Act of Parliament that would remove their difficulties (Hear, hear). But he did believe that if it should please Providence to bless the British farmer with a cycle of prosperous seasons in the same measure that they had lately had adverse seasons much of the distress which existed at the present time in this country would disappear (Hear, hear). Thanking them for the kind manner in which they had inaugurated his year of office, he assured them that he felt deeply interested in the success of the Farmers' Club. He congratulated the retiring chairman upon the success which had attended the club during his year of office (cheers). No one seeing the important and influential meeting that evening could suppose that the Farmers' Club was in a retrograde position (cheers); but he would rather say that it was a proof that it was appreciated more and more and was an augury of future usefulness (Hear, hear). He had been sometimes told that, being engaged in business and being a borough member, he could have nothing in sympathy with agriculturists, but he desired to express his candid opinion that it would have been a very bad time for the country when differences of interest between country and town were so marked that a borough member could have no sympathy with agriculture (Hear, hear). On the other hand, he believed that they all appreciated the boroughs as providing their customers, and he trusted that they might continue to increase in prosperity and provide more customers day by day. They might be sure that whatever might be the efforts of agriculturists to produce food for the nation, if they had not a nation to eat that food it would not be of any use to produce it (Hear, hear). His opinion was that the interests of the producer and of the consumer were identical, and he believed that whatever was done

to promote the prosperity of the British farmer would also be the long run conduces to the prosperity of British manufactures and commerce (Hear, hear).

Mr. JAMES HOWARD asked the indulgence of the Chairman to offer some remarks as to what had been said about protection, and observed that there was not the slightest chance that the people of England would ever submit again to see their food taxed. They would unite as one man in insisting that the policy of free trade to which they had been subjected for thirty years should not be reversed (Hear, hear).

The CHAIRMAN said that he was at one time a protectionist, but he hoped that the farmers of England would never again ask for protection (Hear, hear). They were too independent for that (Hear, hear).

Mr. J. J. MACCHI in proposing the toast of "The Smithfield Club," said he could recollect the time when the Shows of that Club were held in the side of a stable in Aldersgate Street. What were then considered beautiful animals were deformities with masses of fat put on here and there, and comparing them with the animals of the present time he must say the latter showed a great advance.

Mr. TREADWELL, who responded, expressed his belief that the Smithfield Club had done a great amount of good, and had been the means of showing the public that animals could be improved. As to the Farmers' Club, he hoped that in their new quarters they would soon meet in increased numbers, and that in the discussions which took place they would hear more practical speeches, and not so much talking from persons who were but little acquainted with the subjects upon which they spoke. It had greatly grieved him to hear certain things said about farmers, and their wives and daughters. He was sorry that those remarks had been circulated about the country, and he hoped that before gentlemen calling themselves farmers set themselves to lecture farmers and their wives and daughters, they would make themselves acquainted with the real facts and not be satisfied with local knowledge (Hear, hear). Such gentlemen should visit some of the farmers' dairies at five o'clock in the morning, and they would then see that the farmers' wives and daughters did something besides playing the piano (cheers and laughter).

Mr. GEORGE STREET proposed "The Committee of Management."

Mr. WILLIAM EYS, in responding, said the last twelve months had been a time of some anxiety in consequence of the complaints respecting the accommodation at the Caledonian Hotel, having necessitated a great deal of work to find a suitable place for the Club meetings. The help of the members was required by the Committee in two ways. One way was by increasing their numbers and having regard to the thousands of persons intimately connected with agriculture in Great Britain, he thought that the present number of 600 ought to be doubled; another way was by sending subjects of papers for discussion.

The CHAIRMAN, in proposing the health of Mr. Druce (Secretary) spoke of the great assistance he had received during the past year from that gentleman. The Club was very fortunate, he remarked, in having selected Mr. Druce, whose services in all matters coming before the Club relating to Bills in Parliament were invaluable (Hear, hear). In the matter, too, of selecting a suitable place for the Club to meet in he had been indefatigable, and it was chiefly through his energies that the central and very good situation had at last been obtained (Hear, hear). He had also shown his great value in coming forward with one of the best papers during the past Session, when through the failure of one of the readers announced, the Club was in want of a subject (cheers).

Mr. DRUCE, in responding, after thanking the Chairman and the assembly for the kind manner in which the toast had been proposed and received, said that not only was it his duty but it was his pleasure also to do all he could to further the interests of the Club (cheers). Although it was a great pleasure for him always to work for the Club, yet that was not unaccompanied with difficulties. For instance, in connection with the preparations for their dinner that evening, he might mention that he had received a post-card having simply the post-mark "London," and without any name being appended, on which were the words "Dear Druce, A. B. and self will dine at Critter-to-morrow; please put us together" (laughter). There was not a single word to indicate from whom the card came (laughter). He quoted the instance simply to show that the

duties of the Secretary were not unattended with difficulties, although they might be small, and he hoped that he had smoothed over all such small obstacles to the satisfaction of the persons concerned, and that they had been able to enjoy themselves. It was, he thought, incumbent upon him to make some allusion to the subscription set on foot at the last annual dinner for the benefit of the gentleman who had preceded himself in the office of Secretary—Mr. Corbet. He (Mr. Druce) undertook on that occasion to receive subscriptions, and he was happy to say that he had had the pleasure of sending a cheque to the amount of nearly £400 to his predecessor (cheers). As to the member of Parliament who had stated his intention to move for a committee to inquire into the Agricultural Holdings Act, the Club had forestalled that gentleman. It had sent out invitations inquiring into the working of that Act, and he had had the pleasure of reading a paper before the Club which embodied all the answers received from many private gentlemen and from public bodies in every county of England and Wales. He mentioned that with pride because the Club was the only agricultural body in the country which had endeavoured to find out how far the Act had been operative, and how far it had not (Hear, hear). If such a Commission as had been suggested were appointed, it would be only right that the Club should send one or two members at least as witnesses, in order to show the public and the farmers throughout England that the Farmers' Club was not wanting in the desire and endeavour to further their interests. That that Club was in possession of a mass of statistics which it would be difficult for a Committee to add to if they sat from that night till Christmas (Hear, hear). As to the question of protection he invited the gentleman who had referred to it to send in that subject for discussion at one of the Club meetings next year (Hear, hear). Ever since he became the Secretary it had been his opinion that one of the greatest drawbacks of the Club was the fact that during the time of their meetings the members who did not care to be present had no place where they could sit down and meet and converse with their friends. It seemed to him that the *raison d'être* of the Club was that every member should have a place in which to meet his friends. He believed that the arrangements which he had made at the Inns of Court Hotel would prove thoroughly satisfactory. There would be a large room for dining, a room for their discussions, and three Club rooms which would always be kept for the use of the ordinary members (Hear, hear). There was one other point which he desired to mention, and it was that during the coming important year for farmers, when so many persons connected with agriculture would come to London for the International Exhibition, the Farmers' Club should, in his opinion, be in some way particularly distinguished. He should, for instance, like it to be the cause of such a conversation between two farmers—a member and a non-member of the Club casually meeting in the country—that upon the farmer saying, "I am going up to my Club in London, and I can there have or do so and so," the latter would remark, "Oh, I can't do that; I wish you would propose me as a member" (laughter and cheers). He should be happy to receive suggestions from members before February next for the furtherance of the object. They had lately been unfortunate in the premises, and he was reminded of the poet's words:

"Oh, Caledonia, stern and wild,  
Meet nurse for a poetic child" (laughter).

Their "Caledonia" had been very "stern," and in many respects very "wild;" but it had not been a "meet nurse" for the Farmers' Club (laughter). Perhaps it was because they were not sufficiently poetical, and were too practical. He trusted that the "fresh fields" of Lincoln's Inn and the "pastures new" of Holborn would bring them new strength, and that that might be a new point of departure from which they would go on increasing and progressing (cheers).

The company then separated.

LOSING THE THREAD.—A little boy weeping most piteously was interrupted by some unusual occurrence. He hushed his cries for a moment; the thought was broken. "Ma," said he, resuming his suffle, "what was I crying about just now?"

# Chambers of Agriculture.

## CENTRAL.

A Council Meeting of the Central and Associated Chambers of Agriculture was held on December 11, at the Society of Arts, Adelphi. The chair was taken at noon by Mr. C. S. Read, M.P., Sir George Jenkinson, M.P. (the President), being absent in consequence of continued indisposition.

At the commencement of the proceedings the Kendal Farmers' Club was admitted into association with the Central Chamber.

Mr. P. PHIPPS, M.P., presented and read the following Report of the Education Committee:—

"In accordance with the instructions of the Council on the 5th March last, the Education Committee caused the report which they then presented to be circulated throughout the Chambers of Agriculture, and in pursuance of the powers given to them to add to their numbers they have obtained the co-operation of Mr. Bowen Jones and Mr. William Stratton. Your Committee has had opportunities during the past year for more fully considering the system of instruction in Agricultural Science recently introduced by the Government Department of Science and Art, and is more than ever convinced that this scheme enables science instruction to be brought within the reach of a considerable portion of farmers' sons at a very small cost. They have to report that these science classes are now established in connection with some of our agricultural institutions, and are meeting with satisfactory support in their respective localities, and are largely attended by students whose privilege it thereby becomes to combine practice with science in their home training in agriculture. They would especially name the class formed in connection with the Newcastle Farmers' Club, mainly through the instrumentality of Mr. Thos. Bell, a member of your Committee. They find that the weakest point in the entire arrangements is the great difficulty of obtaining properly trained Science Teachers, and therefore recommend that your Council should make the following representations to the Department of Science and Art:—

- 1st. That it is of the utmost importance that instruction in the Principles of Agriculture should be forthwith given to those who are now in the Government Schools at South Kensington, undergoing preparation for acting as Science Masters.
- 2nd. That every assistance which the Department can render for giving instruction in the Principles of Agriculture to Science Masters now settled in the country as Teachers should be afforded them.
- 3rd. That the study of the Principles of Agriculture should be encouraged in all Training Colleges in which Masters are educated, by allowing them the option of taking this subject in common with other sciences, as one which will carry marks toward their certificate.

In submitting this report your Committee further venture to recommend that each of the Local Chambers of Agriculture be invited to appoint an Education Committee for the purpose of co-operating with existing educational institutions in the promotion of Agricultural Education in their respective districts. The Secretary of the Science and Art Department at South Kensington will, on application, furnish information as to the preliminaries necessary to start a class, and what assistance Government will render. And your Committee understand that an official representative of the Department will be sent, free of expense, to any locality where more detailed information is required in view of the proposed formation of an Agricultural Science Class.

(Signed) PICKERING PHIPPS,  
Chairman."

Mr. PHIPPS having moved "That the Report be received and adopted,"

Earl FORTESCUE said he had very great pleasure in seconding the motion for the adoption of a Report which seemed to him a very well-considered and very practical document. It was quite clear that amid the severe competition with foreigners—to which agriculturists as well as all other manufacturers—farmers might be called manufacturers of food both in an animal and vegetable form—were exposed, it was abso-

lutely necessary that they should not content themselves with mere scientific knowledge. Scientific knowledge without practical experience had over and over again brought misfortune and loss upon persons who had undertaken to conduct agricultural operations with the aid of science alone. But he thought he might appeal to some of the most practical as well as scientific agriculturists in England connected with Chambers of Agriculture, as to whether practical experience alone, without that recurrence to principles which science had laid down as a necessity had not also tended to retard agricultural improvement, and whether a great deal of money had not been wasted in that way. The motto of the Royal Agricultural Society, "Practice with Science," seemed to him to be a sound one for the manufacturers of food, whether animal or vegetable, as well as for manufacturers of other kinds of produce (Hear, hear).

Mr. JASPER MORE said he should like to know what steps had been taken for the formation of classes—whether that object had been practically carried out in any of the agricultural districts.

Mr. BELL (Newcastle) said he had great pleasure in suggesting that the Chairman of the Education Committee (Mr. P. Phipps, M.P.), should be asked to make the recommendations included in the Report to the Department of Science and Art. In reply to the gentleman who spoke last he was glad to be able to say that at Newcastle they had succeeded in forming a class in which the principles of agriculture were being taught at the present time, and, as he had reason to believe, very successfully taught.

The CHAIRMAN: In connection with what P

Mr. BELL said it was in connection with the Newcastle Farmers' Club (cheers). They had, perhaps, at Newcastle special facilities for carrying that out, new science and art schools having been recently opened there, and the whole of the 24 departments of science and art being included in the teaching. A communication was received from the Chairman of the Committee to the effect that the Committee would be very glad if the Newcastle Farmers' Club would co-operate with the Science and Art Department in endeavouring to form a class for the 24 subjects. Owing to representations made by that Chamber the subject had been before the Club for some time, and they had talked the matter over with the Science and Art local committee. The scheme which was ultimately adopted was this. Thinking they would not be able to secure to the teacher a sufficient salary to remunerate him if he had only one class, they determined to try and establish a class in some of the neighbouring towns of Northumberland and Durham, so that the teacher might teach a separate class, if possible, on each day of the week. The appeal made was well responded to, and there was a great number of students belonging to the class of young men whom they most desired to get hold of—sons of practical farmers. The advantages of combining practice with science did not require any proof. As an agriculturist he had taken great interest in that subject, especially since so much had been said about agricultural labourers getting a superior education to that generally given to the sons of middle-class farmers. If any scheme could supply the deficiency in that respect, it was, he believed, that Government scheme, which would enable sons of farmers, close to their own homes, to get instruction adapted to the walk of life in which they might be expected to earn their living. They all knew that the sons of men who were somewhat above the rank of middle-class farmers had been sent to expensive schools where they were taught many things which were not likely to be of much use to them in after life, and here was the very instruction which all must desire that such persons should receive available at a small expense. There was but to believe that it that scheme were properly carried out it would prove an immense advantage to the farmers of this country (Hear, hear).

The motion was then adopted.

The Report of the Highways Committee was deferred until the February meeting of the Council.

Captain CRAIGIE presented a short report from the Weights and Measures Committee.

On the motion of Mr. PELL, M.P., seconded by Mr. LAWRENCE, the annual Report of the Local Taxation Committee, presented at the last meeting, was adopted.

Mr. PELL then presented the 13th Report of the Council as prepared by the Business Committee.



The question of disease in pigs, in relation to the Contagious Diseases Act, was then discussed, and

Mr. BROWN called attention to the omission of all mention of the Malt-tax in the Report.

A long discussion ensued, and Mr. BROWN moved as an amendment to a motion for receiving the Report:—"That there is a serious omission in the Report with regard to the Malt-tax, which ought to be remedied."

On a show of hands the amendment was negatived, the numbers being for the amendment 9, against it 23.

A similar proposal, with regard to the prevention of diseases among swine fell to the ground for want of a seconder; after which the Report was adopted, with only one dissentient.

At the annual meeting of the Chamber, which followed, Treasurer, Mr. Clayton, laid on the table a statement of the accounts, and observed that, owing to the illness of Mr. Wilson, the Auditor, it had not yet undergone an audit.

On the motion of Mr. LAWRENCE, seconded by Mr. JABEZ TRAYER, Mr. Willson was re-elected Auditor for the coming year; and subsequently the following subscription members were re-elected members of Council:—Captain Craigie, Mr. Read, M.P., Mr. Pell, M.P., Mr. Phipps, M.P., Mr. D. Long, Mr. Jabez Turner, and Mr. Storer M.P.; and Lord Forseteau in the room of Mr. Jasper Murr, and Mr. John Frask in the place of Mr. Trotter (Lincoln-hire) resigned.

The annual Report of the Council was adopted, and on the motion of Capt. CRAIGIE it was agreed that the Chamber, at its rising, should adjourn until the February meeting of the Council, in order to receive the Auditor's report.

The Marquis of Huntley was elected President for the ensuing year.

## WEST SUFFOLK.

A meeting of this Chamber was held at Bury St. Edmund's on December 18, Mr. T. Thornhill, M.P., in the chair. The first subject for discussion was "The Highways Act," introduced by Mr. W. Biddell.

Some discussion followed, in the course of which Mr. G. H. NUNN proposed a resolution to the effect that the Chamber was of opinion that highway districts should be established, and that the Union should be the area.

Mr. BIDDELL said he should wish to meet that by a direct negative.

The CHAIRMAN put the motion, and three only voting for it, it was lost.

Mr. BIDDELL then moved a resolution to the effect that if the county was divided into sanitary districts the sanitary areas should be adopted for such districts.

Mr. NUNN seconded the proposition.

Mr. MANFIELD proposed an amendment to the effect that in the opinion of that Chamber the union area was too large.

The CHAIRMAN put the amendment, when seven voted for and seven against, and Mr. Thornhill gave his casting vote in favour of the original motion, which he put, and it was carried by a majority of one.

Mr. BIDDELL then moved that there should be no division of roads into main roads in ordinary highways.

Mr. NUNN seconded the motion, which was agreed to.

The Rev. C. W. JONES then read a paper on the Weights and Measures Act, and concluded by proposing:—

1. That it is desirable that all grain and its dry products be bought and sold by weight.
2. That this weight be the cental of 100lb.
3. That application be made to the Board of Trade to recognise the cental as an imperial denomination.

The discussion was adjourned.

**ROMAN HISTORY.**—A gallant young foxhunter, qualifying for a seat in Parliament, amused himself recently by giving instruction in Roman history to the schoolboys in his village. After having eloquently expatiated on the death of Caesar, which took place on the steps of the Senate house, he proceeded to examine the children, in order to prove their attainments. In answer to his question, "Where did Caesar meet with his death?" one boy eagerly responded, "In the synagogue;" while another as promptly corrected him by the remark, "No; it was in the summer-house." The rural intellect does not appear quite equal as yet to the assimilation of lectures on Roman history.—*My Fair.*

## THE AGRICULTURE OF LOMBARDY.

### No. II.

The agricultural productions of the country are many and varied, and extend from the lemon and olive-trees of the Lake of Garda to the pasture-grounds of the Alps. Vines and mulberry-trees, with wheat, Indian corn, and other grain are grown on the hills and upper plain; while rice, flax, and hay form the chief products of the irrigated lands. Lombardy is rich in silk, cheese, and butter.

The characteristics of the different provinces, the methods of cultivation, and the system of tenancies vary according to the position, the degree of fertility and nature of the soil, and the capabilities for irrigation. I am indebted to a report written by the President of the Milan Chamber of Agriculture, which divides the whole territory into three great agricultural zones, marked out by nature:—The upper, or dry zone, is formed of that part of the district which faces the north-east, commencing a few kilometres above the City of Milan, and extending to the foot of the Brianza hills. It is bounded on the north by the district of Monza and the Province of Como, and on the east by the River Adda, which divides the Provinces of Milan and Bergamo. The middle zone, also looking north-west, comprises that portion of the territory which lies between the upper zone and the City of Milan. The lower or irrigated zone includes all the southern portion of the district, and is bounded by the Province of Pavia on the south, by the district of Lodi and the Province of Crema on the south-east, and by the district of Abbiategrasso on the south-west.

Jacini, in his work on the landed property of Lombardy, remarks that the country presents this peculiarity—that in one day's journey across its territory the traveller meets with many varied systems of agriculture, and the most different customs. The district of Milan, in a small way, offers the variety shown on a large scale by the whole region. Thus, in the north, proprietors in general superintend the metayers on their estates. The peasantry under the metayer system are more independent than in the lower zone. The population is dense and laborious; the fields are cultivated with corn, maize, vines, and the mulberry-tree; but the produce is subject to drought, to the oidium, and to atrophy.

In the middle district the crops are more flourishing than in the upper, under the use of sewage manure brought from Milan, and by means of irrigation, which, if not very abundant, is sufficient to permit meadows and rice-fields to alternate with corn, maize, and the plantations of mulberry-trees. In the lower zone there are no metayers; the population, not so dense, is less independent, but production is more certain. The peasant is not attached to the soil, but his daily bread is assured. Here the farms are of large extent, in order that the mechanism of irrigation may be fully utilised, and on them is found a class of farmers possessed of means, activity, and intelligence—the true representatives of agricultural industry. With few exceptions the estates in this district are leased out to tenants for terms of nine or twelve years. It is in this portion of the territory that tradition, study, and indefatigable labour have produced that system of irrigation which so justly forms the admiration of strangers. Here wheat, the vine, the mulberry are either not cultivated or are of secondary importance, and their place is supplied by rice fields and meadow-land.

Lombardy, Piedmont, and Emilia cultivate rice on a large scale in permanent or temporary rice-grounds, which last from two to three years, and occupy from one-fourth to one-half of the arable lands, but more commonly



one-third only, so that, in the rotation of crops, one crop of rice is usually raised between two crops of maize, both being produced without manuring. The period of sowing extends from the beginning of March to the beginning of May. The new rice-lands are sown first, those which have been established for one or more years at a later period, as the soil is benefited by exposure for some time to the heat of the sun. Rice in the husk (locally termed *risone*) is employed as seed, in the proportion of from 3 to 4 bushels per acre according to the nature of the soil. It is sown by hand, and as the land is literally in the state of mud, it is very laborious and very unhealthy work for the cultivator. It is necessary not to sow thick, and in proportion as the land is strong the quantity of seed is diminished. It is usual to soak the rice-seed in water for twenty-four hours previous to sowing, with the double object of quickening its vegetation and preventing it floating on the surface of the water as, without this precaution, it occasionally does. If new rice is employed as seed it requires to be sown early, that is, in the course of the month of March: old grain is sown later in April or at the beginning of May. Twelve or fifteen days after sowing, the young plants rise above the surface of the soil, and, as they increase in height, the sheet of water is gradually increased with them, so that merely their tops show above it. The fields are kept in this flooded state until the plant flowers, which, according to the time of sowing, takes place between the middle of July and the middle of August. About this time the flooding of the crop is replaced by regular but abundant irrigation, at intervals of a few days. When the head becomes well formed, the grain of food size, and the colour changes from deep to lighter yellowish green, all use of water is discontinued, the land is drained as dry as practicable, and in ten or fifteen days afterwards the crop is ready for cutting. The rice harvest in the north of Italy ranges, according to circumstances, from the middle of September to the beginning of October: and the crop is cut with the scythe when large compartments are used, and with the reaping hook in the smaller ones. The grain is made into small sheaves about 25 or 30 lb. in weight, and with a constant length of 18 inches. When the plants are longer than this they are cut higher, and the stubble is afterwards ploughed in as manure. The thrashing is effected after the Oriental fashion, by the treading of bullocks or horses; and the grain is subsequently dried for some days by exposure to the sun. It is then stored, and during the winter, when water is cheap and abundant, it is cleared of the husks in the rice mills attached to the farms, which are worked by water-power.

The provinces of Brescia and Cremona produce rice to the extent of more than one-tenth of their produce in wheat; the Bolognese produces one-fiftieth part; as regards the province of Pavia, all its cereal wealth consists of this produce, which is more than four hundred thousand hectolitres. Rice, with its husk on (*risone*) is passed through the *pista*, a very imperfect machine, which cleanses it, that is to say deprives it of its covering; when it is afterwards bleached by means of a brush specially invented for that purpose, made of a hempen cloth. Rice is used for cooking or for flour, and no Milanese will consider the *menù* at his table complete without the familiar dish of *risotto* or the *potage riz*.

The maize or grano turco is believed to have been a product introduced from Spain in the sixteenth century. In Lombardy the maize became the substitute for millet as well as for oats, barley, and even wheat, when it had the advantage of a soil in the plains and of irrigation. The produce of the irrigable lands was thereby much

increased, to the great benefit of the rural population, in fact of the whole agricultural interests of the country. The uses which maize subserves are very numerous, whether as semola, or as flour for making *polenta*, which has been consumed especially by all the rural population of Lombardy since the last century. This valuable corn is subject to the mould, which is produced by the generation of the *Sporisium maydis* and many persons attribute to this alteration in maize, and not to the nature of the grain itself, the *pellagra*, or, as it is called, the "poor man's disease," which, in France as well as in Italy, follows the production of maize whenever this corn has been used almost exclusively as the main article of food.

The production of milk and attention to the products of the dairy is general throughout the Peninsula. The greatest importance is given to these industries in the northern provinces, although large dairies exist in Lätium, Apulia, Campania, and Sicily, or wherever fresh milk is sold for the consumption of populous localities, with the sole difference that in northern and central Italy preference is given to the bovine race. It is only in the mountainous districts, in many cities of the South and in Sicily that an equal consumption, or even the milk of the goat is preferred. Fresh milk sells at widely different prices, always greater in the south than in the north: these prices vary from a minimum of 15 cents the litre at Lodi and Milan, to a maximum of 40 to 50 cents at Naples and Palermo. Yet, in spite of this diversity, no attempt has been made at the preserved or concentrated milk, or a quicker transport from one region to another. The making of butter is equally carried on in proximity to all cities, the use of this condiment being general in Upper Italy, whereas in Central and Southern Italy olive oils are consumed. Butter, in sufficiently large quantities for exportation, is principally produced from the irrigated region of Lombardy; the secondary place is held by Piedmont, Venetia, and the Emilia.

The same dairies which produce butter in abundance attend to the fabrication of the *grana* or Parmesan cheeses, which are made with cows' milk boiled hard. Lodi, Codogno, Corsico, Milan, and Pavia are the chief centres for the commerce in butter, mostly of a superior quality and manufactured with extreme care. It is sold fresh and sweet, and when sent to distant parts is compressed within barrels; very seldom, and only to gratify the taste of foreign consumers is the butter slightly salted in the barrels, no salt being ever added in the making. The exportation of fresh butter to France was 1,109,761 kilograms in 1871, 1,135,116 in 1875, and 1,244,900 in 1876. The production of eggs has taken, of late years, a wide extension in Italy, especially as an article of export; and the regularity of increase to the different European markets indicates how this occupation is becoming a solid and remunerative one. The breed of Italian fowls are held in high esteem on the Continent—more especially in Germany—owing to their fecundity, their production of eggs, and the weight and size of the egg itself.

Through the courtesy of Vice-Consul Kelly, our representative at Milan, I was enabled to visit a farm at Villamaggiore, near Pavia, belonging to Baron Leonina. This may be considered one of the most highly cultivated of the Lombard rice and dairy farms, since the Baron takes especial interest in the improvement of his property, and it cannot therefore be considered otherwise than as an example of the best class of agriculture. Although comparatively wanting in the picturesque, a richer expanse of cultivation could scarcely be imagined, than these rice and Indian corn fields, which under the burning Italian sun the eye glances over with supreme pleasure. The meadows are moistened by copious streams of running water which completely inundate the

rice fields. The farm buildings stand in a large quadrangle having on one side the residence of the farmer, or *ballo*, and the buildings for cattle, all of the most substantial description; and on another side of the square is a range of houses in which the peasants reside. The *employés* of the farm are thus collected in one spot instead of being scattered about a village, as in England. At the mill close handy to this quadrangular erection I found whole families of peasants, women and children of all ages, working together upon the rice floor. The mill itself was driven by water power, as steam appears quite unnecessary amongst such powerful hydraulic appliances. The construction of these mills is ordinarily the same at all places. A small stream of water gives motion to a common undershot wheel, about eight feet in diameter. The axis of this wheel passes through the side wall of the mill into the interior, and by means of wooden teeth it elevates four (or as many more as are necessary) upright beams, the lower ends of which are covered with sheet iron. At a certain height the beams are detached and fall of their own weight into egg-shaped receptacles which contain the uncleaned rice. These receptacles are formed in a great block of granite, one being placed immediately under each beam. The constant pounding the rice is thus subjected to breaking the husk which is then winnowed off from the pure grain. The uncleaned rice is gathered in great granaries; and, as in the process of cleaning, the grain is a good deal broken, the rice is itself separated and stored according as it is in entire or fractured grains.

In the quadrangular farm building the cattle had left their huge stalls, the early morning operations of milking being over; but the *casaro*, or cheesemaker, and his assistant the *sotto casaro*, were engaged at the hydraulic machines. The produce of this farm is the *grana*, or Parmesan, and there was an ample stock of these cheeses in the storehouse. The sizes, I believe, are generally 45 centimetres in diameter, 16 centimetres in height, and weighing 25 kilos.—about 55 lb. English. To make a *forma* of cheese per diem, that is, 50 kilos. of weight, not less than fifty cows are required, and on some farms as many as one hundred and twenty and one hundred and sixty head are kept. The *grana* are made at two different periods; the one from April to September receives the name of *maggenga*, and the other, from September to April, is called *invernenga*—this is poorer in quality and less esteemed than the former. When the cows on the farm are few in number, the owners either join together in making the cheese or sell the milk to the professional cheesemaker. The *casaro* himself is a person of considerable importance, who stands in a better position than the other *employés* on the farm. The *casari* form a species of caste, who surround their craft with as much mystery as possible. They are fully conscious of their importance as the arbiters of the most valuable product in the country, and are held in great consideration by the farmers, who treat with them upon terms of equality.

The cows are imported chiefly from the Swiss cantons of Schwytz, Lucerne, Zug, Uri, and Unterwalden. Brought into Lombardy when three or four years old, before they have completed their full growth, and fed on the herbage of the plain, they fill out and grow so rapidly, that a cow of the largest breed, called *matronale*, where there are *marcite*, will give forty and more Milanese *brenti* of milk per annum. The Swiss cows, born in a healthy climate, fed on aromatic herbs, and carefully bred, are of sound constitution, and capable of resisting the inclemency of the seasons. The grass of the Lombard plain is such that any cow would give milk fit for *grana* cheese. Rice, Indian corn, and meadows enriched by these fine herds—worthy to adorn the canvases of a Cuyp—are the characteristic agricultural features of Central Lombardy, more es-

pecially the Milanese, and contrast with the mountain districts around the Lakes of Maggiore, Como, and Lecco, here the vine, olive, and mulberry are the prominent features of the landscape. EDW. T. BLAKELY, F. S. S.

EXCHANGE NO ROBBERY.—Two wedding couples presented themselves at the *Mairie* in a suburb of Paris, to carry out the civil portion of their marriage contract. They ranged themselves on opposite sides of the Mayor's throne, and faced one another. The Mayor was asking a question of one of the bridegrooms, whose attention was thus distracted from his bride. On turning round to look at her when he had answered the question, he caught her making "sheep's eyes" at the bridegroom opposite. Being of a jealous temperament, he laid his hand roughly on her arm, and said, sharply: "Mademoiselle, which of the two brides are you? You are mine, I believe; then oblige me by confining your glances to me." The bride was a young woman of spirit, and, resenting the tone in which the reprimand was made, retorted, "Ah, monsieur, if you are jealous already, I am likely to lead a pleasant life with you!" The jealous bridegroom made an angry reply, and then the other must needs put his ear in. "Pah! monsieur, why should you make such a fuss because mademoiselle chooses to favour me with a glance?" Thereupon his bride turned away upon him and exclaimed, "Hé monsieur, it would seem then that you like to have ladies make eyes at you! Now I know what to expect from you; but you might at least have had the decency to keep this proof of your faithlessness concealed from me here!" and with this thrust she burst into tears. In vain the Mayor attempted to pacify both parties. The bridegrooms stormed at each other, and the brides, between their hysterical sobbings, mutually accused each other with perfidy. What was to be done? At last the Mayor, losing temper, cried out, "Am I to proceed with the ceremony, or am I not?" The two brides, with one accord, screamed "No!" "Perhaps," said the Mayor, whose wrath had again cooled down, "you could arrange matters between yourselves if you were left alone. The clerk will show you to my private room. I will give you half-an-hour." At the expiration of that time the parties were summoned to appear again before the Mayor. "Have you settled your differences?" he asked. "Yes, Monsieur le Maire," exclaimed both bridegrooms at once. "Oh, then I may proceed with the ceremony!" "Yes, Monsieur le Maire," but—but—"Well, what is it?" "We have effected a change, Monsieur le Maire." "A change! What do you mean?" "A change of brides, Monsieur le Maire." And so it was; the jealous bridegroom had taken the jealous bride, and the young lady of fickle glances had taken the gentleman who liked ladies to "make eyes" at him. The astonished Mayor looked at them in silent amazement for a moment or two, but they met his look unabashed, so he shrugged his shoulders and said, "Well, if you are satisfied, it is no business of mine. I'll proceed with the ceremony." And married they were.

AMBITION.—Down in a remote country village the daughters of the rector annually get up a performance for the benefit of the schools. It usually takes the form of a burlesque or extravaganza. Every year these damsels quarrel violently—not as to who shall have the best business, or play the most important characters, but as to who shall wear the shortest petticoats. What a pity this country village is beyond the jurisdiction of the Lord Chamberlain!—*World*.

EMBARRAS DE LAIDEUR.—David Crockett once visited a menagerie at Washington, and, pausing a moment before a particular hideous monkey, exclaimed, "What a resemblance to the Hon. Mr. X.!" The words were scarcely spoken, when he turned and, to his astonishment, saw standing at his side the very man whom he had complimented. "I beg your pardon," said the gallant Colonel; "I would not have made the remark had I known you were near me, and I am ready to make the most humble apology for my unpardonable rudeness; but"—looking first at the insulted member of Congress, whose face was anything but lovely, and then at the animal compared to him—"hang it if I can tell whether I ought to apologise to you or to the monkey."

## REVIEW OF THE CORN TRADE,

FROM THE MARK LANE EXPRESS FOR THE WEEK ENDING DECEMBER 21.

Despite some indications of a thaw which were apparent during the earlier part of the week severe frost has prevailed for some days past, accompanied by a heavy fall of snow. All inland navigation has consequently been seriously impeded, and in some parts of the country entirely stopped. The atmosphere has, however, been clear and bright since Friday, and Christmas has once more come round, attended by all those time-honoured weather characteristics which serve to enhance our enjoyment of the festive season. At the same time, considering the terrible amount of distress which prevails among the poorer classes just now in so many parts of the kingdom, milder weather would scarcely be regarded with dissatisfaction, when the comfort of those is considered to whom a harsh and inclement winter too often means privation and sickness. The frost has proved salutary from an agricultural point of view, as the too rapid growth of cereals has been checked. Field work has of course been out of the question, but as most of the land intended for winter wheat has already been sown, the interests of farmers have not suffered materially by the delay. The snowfall in Scotland has been very heavy, and has served to protect the young plants in a great measure from the action of frost; while in France, where the weather has also been very severe, a decided stop has been put to the ravages of insects and field vermin. Farmers continue to market their wheat with some freedom, but, notwithstanding the improved condition of the offerings, the trade has ruled very flat in the majority of the provincial markets, as millers are disinclined to add to their stocks at the close of the year. An equal amount of dulness has marked the London trade, and little or nothing could be done with home-grown grain at Mark Lane on Monday on account of the dense fog, which for some hours not only prevented buyers from examining samples, but almost defied personal recognition. Foreign wheat, of which the imports are now assuming much narrower proportions, has been dealt in sparingly, but in spite of the limited nature of the demand business has not lacked some features of steadiness, and in the sales made last week's prices have been repeated. At the same time clouds of doubt and distrust obscure the commercial horizon, paralysing healthy trade, and shutting out the view of possible profit which might reward the judicious action of speculators. With the holidays so close upon us, it can scarcely be expected that any great change can occur in prices, but there are sufficiently strong grounds for anticipating a revival of demand, and consequent enhancement of values after the turn of the year, having regard to the diminished imports and increased requirements of winter. With the exception of oats, the continued heavy arrivals of which cause prices to droop, all varieties of feeding corn have sold slowly at last

week's currencies, and the steadiness shown has been more apparent in the general tone of the trade than in the actual amount of business transacted. With small arrivals at ports of call during the past week, the floating cargo trade for wheat has ruled steady for American sorts, whilst Californian and Ghirkas have been easier to buy. Owing to the absence of demand maize and barley have declined at about 3d. per qr. The sales of English wheat noted last week were 51,419 qrs., at 40s. 81., against 42,759 qrs., at 51s. 4d. in the previous year. The London averages for the week ending Dec. 21st were 41s. 33. on 875 qrs. The imports into the United Kingdom for the week ending Dec. 14th were 767,337 cwt. wheat, and 144,799 cwt. flour. With small imports of all articles except oats, and a very moderate attendance of millers and country buyers, the market opened slowly on Monday last, and little or no business was done owing to the dense fog which prevailed until nearly two o'clock. As soon as buyers could see the samples some sales were made, and a certain amount of steadiness was apparent particularly for the finer sorts of foreign wheat, but transactions in other articles were of a most meagre character. The week's supply of English wheat was 3,963 qrs., and, with very little fresh upon factors' stands, there was practically nothing done, prices remaining nominally unaltered in the absence of business. The imports of foreign were also very light, the return showing a total of only 23,463 qrs., of which quantity Germany furnished 12,018 qrs., the United States 6,125 qrs., and the East Indies 5,298 qrs. The exports were 3,023 qrs., against 2,414 qrs. in the previous week. Business was quite at a standstill during the earlier hours of the market, but between two and three o'clock country millers made their purchases, and a fair consumptive demand was experienced at the currencies of the preceding Monday. There were 5,321 qrs. of home-grown barley and 9,434 qrs. of foreign. The tone of the trade was steady, but there was little actual business done, and prices underwent no change for either malting or grinding varieties. Of maize the arrivals were again very light, the week's supply being limited to about 7,000 qrs. from New York. Both round and flat corn was neglected, but prices were not notably lower. The imports of oats amounted to nearly 80,000 qrs., notwithstanding which the trade was, if anything, less depressed than at the close of the previous week, sales being practicable at the quotations of the preceding Monday. On Wednesday the return showed 380 qrs. of English wheat and 13,690 qrs. of foreign. The demand was exceedingly dull both for wheat and feeding stuffs, but Monday's rates were maintained in the few transactions which took place. On Friday the supply had increased to 780 qrs. of English wheat and 32,780 qrs. of foreign. The market was thinly

attended, and the weather being again very foggy, business was difficult to transact. An inactive trade was experienced for wheat at nominally former prices, while spring corn was dull and unaltered in value. The imports of flour into the United Kingdom for the week ending December 14th were 141,799 cwt., against 193,062 cwt. in the previous week. The receipts into London were 19,362 sacks of English, and 7,108 sacks and 14,067 barrels of foreign. American barrels are offered for shipment on rather lower terms, but on spot last week's prices have been fairly supported both for sacks and barrels. The trade, however, remains in an inactive state. The week's arrivals of beans were 5,42 cwt., and of peas 34,225 cwt., showing a decrease of 14,245 cwt. on the former, and 11,277 cwt. on the latter. No improvement has taken place in values, but beans have been in rather better request at former quotations, while peas have ruled steady. The deliveries of malt were 17,410 qrs., and the exports 1,050 qrs. There has been no appreciable change in this branch of the trade during the past week, transactions having been few and prices unaltered. As is usual at the approach of the holiday season, business in agricultural seeds has moved within very narrow limits, but the trade appears in a healthy condition, and renewed activity may be looked for after the turn of the year. English red clover has been offered rather less freely, and really choice parcels seem scarce. As regards American the position remains unchanged, the markets on the other side keeping steady, while the seed exported goes principally to Continental ports. Alsike has been more inquired for, and prices have advanced 2s. per cwt., but in other descriptions no quotable change can be recorded. The country markets have been fairly supplied with grain from the farmers, and as a rule last week's prices have been repeated for wheat and spring corn, although in a few instances a decline of 1s. per qr. on the former has taken place. At Liverpool, on Tuesday, a quiet tone prevailed, and the attendance was somewhat scanty, but at the close of the market there was an average trade done in wheat at full prices. Flour was comparatively dull, but without change in value, while beans were quoted 6d. per qr. lower. Maize met with little attention, mixed American closing at 23s. 6d. per 480lb. The week's imports included 87,000 qrs. of wheat and 15,000 qrs. of maize. At Newcastle the grain trade has been very quiet, and prices have evinced a declining tendency for all articles. At Wakefield millers have bought sparingly, but as holders have shown less anxiety to press sales the business passing has been at full rates. Barley and beans have also suffered no decline, but maize has given way 3d. per qr. At Edinburgh the supplies have been large of barley but moderate of other articles. Wheat sold slowly at market on Wednesday at 6d. to 1s. per qr. less money, while oats ruled dull. At Leith the frost has been severe, and a great deal of snow has fallen. The arrivals from abroad have been light, and Scotch wheat has given way 1s. per qr. on the week, while foreign, with no pressure to sell, has not declined to any quotable extent. Malting barley has receded 1s. per qr., but no change has

taken place in the value of grinding sorts. Maize and beans have met a retail sale at former prices. At Glasgow the imports of wheat have been small, and the trade has ruled dull at unaltered rates. Wednesday's market was fairly attended, but the business done was principally of a retail character. Oats were 3l. to 6l. cheaper, and barley, maize, and beans steady. At Dublin the weather has been severe, with hard frost. Business in grain has been mainly confined to the supply of the wants of retail buyers, and both wheat and maize remain unchanged in value. At Cork the wheat trade has been dull, and where sales were pressed holders have had to make a slight concession. The same remarks will also apply to maize, the consumption of which is still small for the time of year.

The following are the reports from Mark Lane during the past month:—

#### Monday, December 2.

The arrivals during the past week have been: English Wheat, 3,808 qrs.; foreign, 26,535 qrs. Exports, 1,295 qrs. The supply of English Wheat fresh up to market this morning was again small, and sales progressed slowly at about late rates. Of foreign the arrivals were also very moderate, and with a fair attendance of millers an improved demand was experienced for all descriptions, at the extreme prices of last Monday.

Country Flour, 21,885 sacks; foreign, 8,125 sacks, 10,615 barrels. There was not a large amount of business done, but where sales were made, previous prices were obtained for both sacks and barrels.

English Barley, 2,911 qrs.; Scotch, 4,055 qrs.; foreign 5,670 qrs. Inferior malting descriptions were the turn cheaper, but grinding sorts underwent no quotable change.

Malt: English, 20,307 qrs.; Scotch, 1,654 qrs. Exports, 1,802 qrs. There was a quiet demand at last week's currencies.

Maize, 8,913 qrs. Exports, 673 qrs. Round corn on spot was fully as dear, but flat was extremely dull, and the turn cheaper to sell.

English Oats, 486 qrs.; Scotch, 274 qrs.; foreign 50,950 qrs. Exports, 1,171 qrs. With continued heavy arrivals the trade ruled slow, and in some cases sellers had to accept 3d. to 6d. per qr. less money.

English Beans, 1,158 qrs.; foreign, 1,471 qrs. A slow sale at nominally late rates.

Linseed, 10,279 qrs. Export, 523 qrs. Unaltered in value.

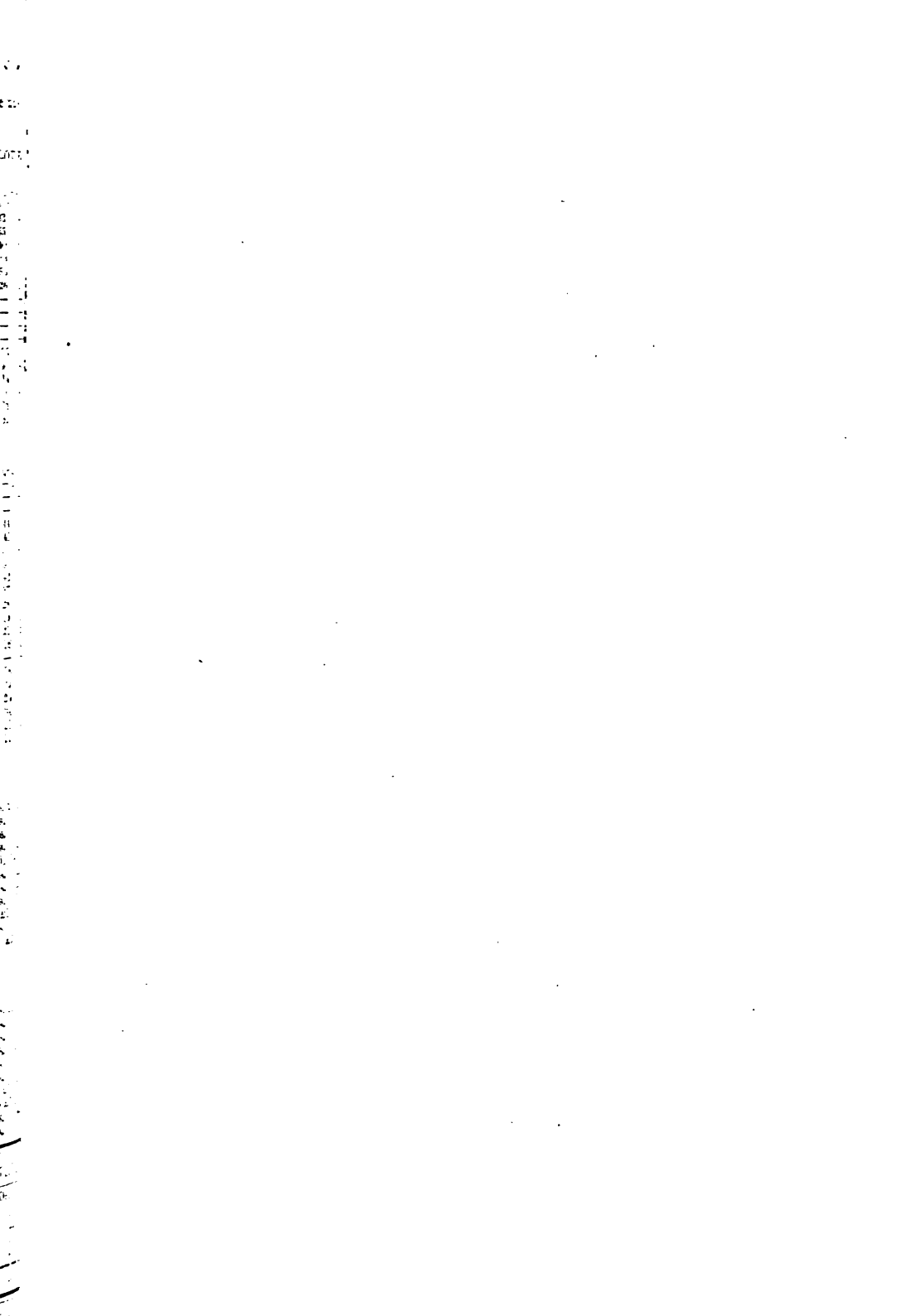
#### Monday, December 9.

The arrivals during the past week have been: English Wheat, 4,481 qrs.; foreign, 69,985 qrs. Exports, 2,414 qrs. The supply of English Wheat fresh up to market this morning was light, and sales progressed very slowly at about last Monday's prices; of foreign the arrivals were liberal, and with a fair attendance of millers a retail consumptive demand was experienced at about late rates.

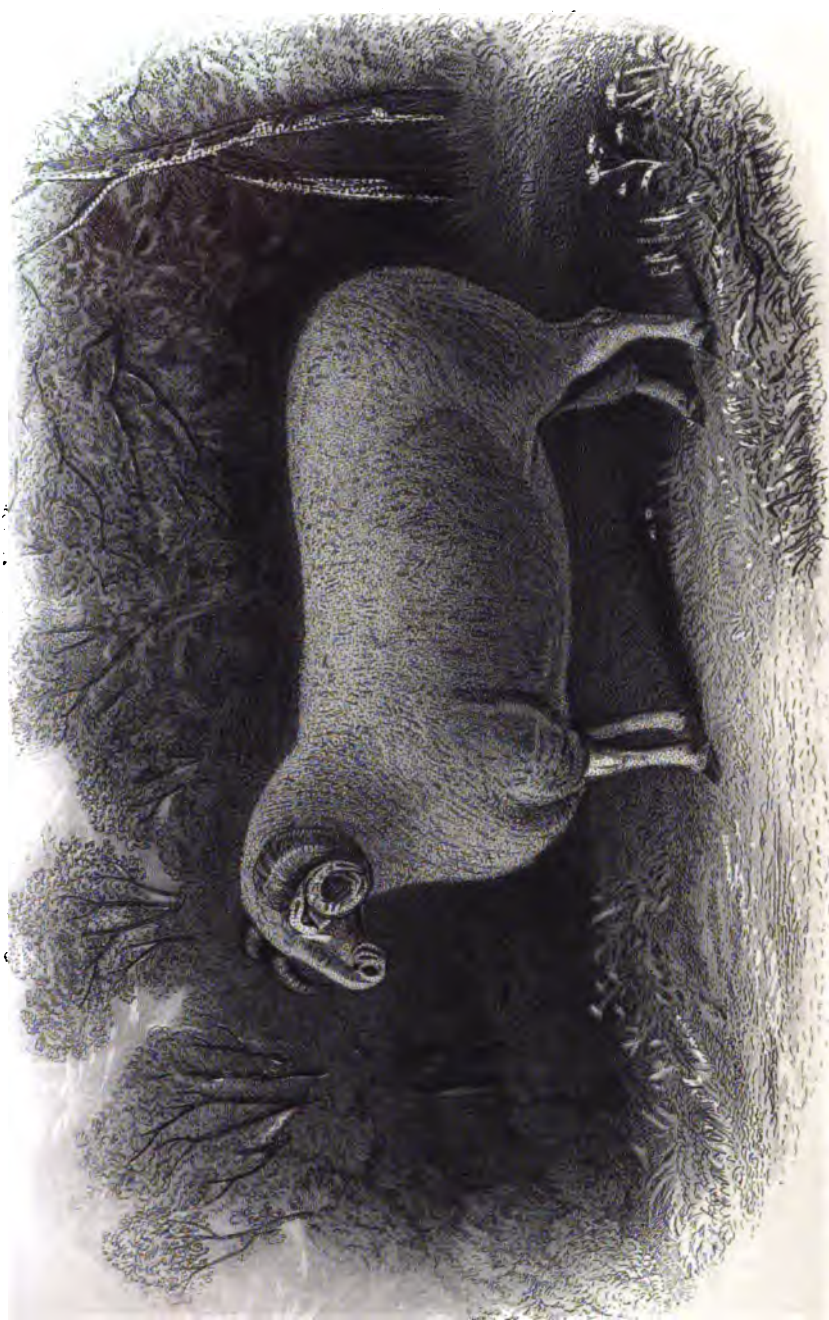
Country Flour, 18,820 sacks; foreign, 7,758 sacks, and 8,744 barrels. There was a quiet but steady tone observable in the trade, and last week's prices were maintained for both sacks and barrels.

English Barley, 3,319 qrs.; Scotch, 4,580 qrs.; foreign, 18,219 qrs. Previous currencies were obtainable for the finer sorts of malting, but inferior lots were almost unsaleable. Grinding descriptions were dull, and the turn cheaper.









*A prize Emment and Desert Horn in the property of Lowest Feathering Coy.  
Halter, New York, and the property of Emment.*

*London: Published by P. Colman & Co. 1840.*

# THE FARMER'S MAGAZINE.

FEBRUARY, 1879.

PLATE.

## A PRIZE SOMERSET AND DORSET RAM.

THE PROPERTY OF HERBERT FARTHING, ESQ., NETHER STOWEY, BRIDGWATER, SOMERSET.

This sheep was bred by Mr. Herbert Farthing (brother of Mr. Walter Farthing, celebrated for his beautiful Devons, so well known in the yards of the Bath and West of England and Royal Agricultural Societies, as well as at the Smithfield Club Cattle Show), and when 1 year 4 months and 3 weeks old was awarded the first prize, with another from the same flock second, at the Bath and West of England meeting held at

Oxford. He is a long, level sheep, with good neck, shoulder, leg, and loin, and will no doubt prove a very useful member of the flock in getting plenty of early lambs, for the ewes of this breed are said to be "in fashion" before any other species, and are consequently much sought after for producing house lamb to supply those who go in for every delicacy of the season at Christmas. They are a very hardy breed of sheep and good folders.

## AGRICULTURAL SOCIETIES.

### HIGHLAND AND AGRICULTURAL.

The monthly meeting of the directors of this Society was recently held, Mr. Ferguson, Kinnochtry, in the chair.

The following are the names of the noblemen and gentlemen to be proposed by the directors for election at the general meeting, on the 15th current, to fill the vacancies in the list for 1879:—Vice-Presidents—The Duke of Athole, K.T.; the Earl of Strathmore, the Earl of Breckinridge, the Earl of Rosslyn. Ordinary Directors—Sir Michael R. Shaw Stewart, of Blackhall, Bart.; Sir Alexander Muir Mackenzie, of Delvine, Bart.; William Dingwall, Ramornie; John Hendrie, of Lartbert; Hugh Kirkwood, of Killermont; Thomas Ross, of Bachelton; James Seton Wightman, of Courance. Extraordinary Directors—The Right Hon. W. Patrick Adam, M.P.; the Hon. George Waldegrave Leslie; Sir John Ogilvy, of Inverquhar, Bart.; Sir Robert Menzies, of Menzies, Bart.; Sir Robert Anstruther, of Balcaskie, Bart., M.P.; John Whye-Melville, of Bennoch; Colonel Drummond Moray, M.P.; Thomas Richardson, Lord Provost of Perth; Wm. Smythe of Methven; Harry Young of Cleish.

The list of candidates for admission as members was submitted, and the Secretary stated that additional names could be received up till the morning of the 15th.

A state of the funds of the Society at 30th November, 1878, and abstracts of the accounts for 1877-78, signed by Mr. Walker, of Bowland, C.B., treasurer, and Mr. Murray, of

Dollerie, chairman of the Finance Committee, and by Messrs Mackenzie and Smith, C.A., the Society's auditors, were submitted in terms of the bye-laws.

The report of the meeting of members, held at Perth on the 13th December, was submitted, from which it appeared—First, that a discussion arose in regard to the premium for the stallion for agricultural purposes to travel in the district this season, in the course of which it was suggested that the directors should increase the amount; and a committee, consisting of Colonel Williamson, of Lawers; Mr. Gardiner, Chapel Bank; Mr. Chalmers, Shielhill; Mr. Crawford, Balgarvie; and Mr. Bell, Kennacoll, was appointed to correspond through the secretary with the directors. Second, that Mr. Chalmers, Shielhill, in suggesting that the Society should offer £100 in prizes for the best managed arable farms, stated that he believed the experiment could be carried out at an expense of £100 more, and wished that the proposal be strongly recommended to the directors to inaugurate such a scheme in Perthshire.

In connection with the first subject, the Board had before them a letter from Colonel Williamson in reference to the amount of the premium to be offered for an agricultural stallion, when the Board agreed to fix the amount at £100. In regard to the suggestion by Mr. Chalmers, Shielhill, the Board did not see their way to entertain the proposal of offering prizes for best managed farms, the subject having been carefully considered last year, and deemed inexpedient.



The SECRETARY reported having attended a meeting of members at Kelso on the 20th December, when the list of classes for the show proposed to be held there in 1880 was approved of, subject to the following suggestions for the consideration of the Board:—1st. That a family prize for Shorthorns should be given at each annual show, the breed being generally diffused; and that prizes of a similar nature be given for the special breeds of different localities—for example, Galloways at Dumfries, Highland at Inverness, &c. 2nd. That there should be a special prize for a stallion for agricultural purposes, to travel the district in season 1880. 3rd. That the family prize for Border Leicesters should include one sired tup, two ewes, two gimmers, two ewe lambs, and two shearing tups—the ewes to have lambs in season 1880, and all bred by exhibitor except aged tup. 4th. That there should be sections for half-bred ewes, half-bred gimmers, and half-bred tups—the latter a cross between a Cheviot ewe and a Leicester tup.

The Board adopted the second and third suggestion, remitted the first to the General Show Committee to decide about family prizes for Shorthorns, and rejected the fourth.

The SECRETARY reported that Dr. Aitken, the chemist to the Society, has arranged to give a series of lectures, free, on chemistry as applied to agriculture, in the Society's Hall, No. 3 George IV. Bridge.

The anniversary general meeting of the Highland and Agricultural Society of Scotland was held on January 15th, in the Society's Hall, George IV. Bridge, Edinburgh. The Marquis of Lothian occupied the chair, and there was a very numerous attendance.

Votes of condolence upon the death of the Princess Alice and the Marquis of Tweeddale were passed. Ninety-one new members were elected.

Mr. MURRAY, of Dolerie, laid on the table a statement of the accounts of the Society for the year ending the 30th of November, which showed the funds, including a deposit of £897 with the City of Glasgow Bank, to amount to £63,581, and the building fund to be £5,387. The expenditure mentioned in this balance-sheet included £336 spent on account of the printing of the report on the present state of agriculture in Scotland for presentation to the Paris Agricultural Congress, and £98 for payment of the expenses of the Secretary and Professor Wilson in attending that Congress.

Admiral MAITLAND DOUGAL, of Scotsraig, submitted an abstract of the Argyll Naval Fund for the year, mentioning that there were at present three vacancies in connection with the fund.

Colonel GILLON, of Wallhouse, gave in the financial statement connected with the show held last year at Dumfries, remarking that the surplus expected was £800. He also reported that the arrangements for the Perth Show were progressing satisfactorily, and that the premium list amounted to £1,086 more than in the case of the show of 1871.

Colonel WILLIAMSON, of Lawers, said the members of the Local Committee were in every way satisfied with the arrangements for the Perth Show except in one particular. What the committee would suggest was that the grant for a Clydesdale stallion for service in the Perth district should be raised from £100 to £150, and that this rule should be followed not only this year but at succeeding shows, so that the best horse in the country would always follow the national show. He moved accordingly.

Mr. GARDINER, Chapelbank, seconded the motion.

Mr. HADDON, Honeyburn, Hawick, suggested that the matter should be left to the directors for decision.

Col. GILLON mentioned that the directors had already considered the question, and had come to the conclusion that £100 grant was sufficient. He therefore proposed that the sum be continued as at present.

Mr. OSWALD, of Dumfries, seconded the proposal.

On a vote being taken Col. Williamson's motion was carried by a large majority.

The following gentlemen and gentlemen were elected to fill the vacancies in the list of office-bearers:—Vice-Presidents:—The Duke of Athole, K.T.; the Earl of Strathmore; the Earl of Breckinridge; the Earl of Roslyn. Ordinary Directors:—Sir Michael R. Shaw Stewart, of Blackhall, Bart.; Sir Alexander Muir Mackenzie, of Dalryme, Bart.; William

Diugwall, Ramornie; John Hendry, of Larbert; Hugh Kirkwood, Killermont; Thomas Ross, Bachilton; James S-ton Wightman, of Courance. Extraordinary Directors:—The Right Hon. W. Patrick Adam, M.P.; the Hon. George Waldegrave Leslie; Sir John Ogilvy, of Inverquhar, Bart.; Sir Robert Menzies, of Menzies, Bart.; Sir Robert Anstruther, of Balcaskie, Bart., M.P.; John Whyte M.-ville, of Bennoch; Col. Drummond Moray, M.P.; Thomas Richardson, Lord Provost of Perth; William Smythe, of Methven; Harry Young, of Cleish.

Colonel GILLON brought before the meeting an application made to the directors for a general show being held at Kelso in 1880, which had been subscribed by the Marquis of Lothian and about 120 of the principal landed proprietors and extensive farmers connected with the border counties, and expressed, on the part of the directors, a hope that the Society would approve of their action in resolving to comply with this request.

Mr. MARTIN, younger, of Auchendennan, in accordance with notice, moved:—"That a committee of members be appointed to consider the whole question of the circuit of the Society's annual shows, and to report to the general meeting in June; also, that pending receipt of this report, the Society should delay until the June meeting decision as to place at which the show of 1880 is to be held." In bringing forward this motion he was, he said, acting in the belief that it might be the means of increasing the usefulness of the Society.

Mr. J. HENRIE, Larbert, seconded the motion.

Lord POLWARTH said that, speaking as more immediately representing the Kelso district, he had to submit that it would be a very great misfortune were that place excluded from the circuit. On the general question he also believed that it would be exceedingly detrimental to the interest of the Society if any of the towns now visited were departed from. He moved the previous question.

Lord LOVAT, in seconding this amendment, pointed out that their name was the Highland Society, showing that their origin had been in the north. The Society was, it thus appeared, at first instituted for the benefit of the Highlands alone; and such being the case, it would be a great hardship to deprive Inverness of the show. It might, perhaps, be said, that their meeting at Inverness did not pay; but he would remind them that the object of the Society was not to hoard money; it was to benefit agriculture throughout the country in all departments and in all districts; and surely if that was its object it was highly important that they should visit those poorer and more ignorant districts where its benefits were most required. He could assure the meeting that the visit of the Society to Inverness really bore good results, as was evident from the large number of new implements and the great attention to stock observed after the last show.

Mr. BETHUNE, of Blebo, supported Mr. Martin's motion.

The Rev. J. GILLESPIE, Mosswald, proposed, as a third motion, that the latter part of Mr. Martin's be omitted, but that the first clause in it be agreed to, with the altered proviso that the report be submitted in January next in place of June.

The Duke of Buccleuch said he could not recall any committee being appointed outside the Directors' Board. The usual practice, when there was a difference of opinion in regard to any point, was to call the attention of the directors to the subject, and it was then taken up by them, and he was sure the directors would now take up the point that had been raised, and be prepared at a future meeting to state their views and the reasons which had led them to the conclusion they had arrived at. For himself he considered that the Society was as much bound to go to the poor districts as the rich ones, and Kelso and Inverness he believed to be both places which should be visited. In all the circumstances, he hoped Mr. Martin would not press for a division, but would leave the matter in the hands of the directors.

Mr. GEORGE GREIG, Harvieston (of Messrs. Fowler and Co.), argued, in reply to the Duke of Buccleuch, that if they were to act on the principle that they had confidence in the directors, and left everything to them, there might as well never be any meeting of members at all. If they wished to have business properly conducted they had no right to take everything for granted. It was their duty to look into the direction of the Society. There was an almost unanimous feeling throughout Scotland in this direction. It was held by

many that the agriculture of Scotland had not progressed through the efforts of the Society during the last fifteen or twenty years. That was the general opinion. He should be sorry to appoint directors and not leave to them what should be left to them; but at the same time he held it was the duty of the Society to look into those grievances which so generally prevailed among their members.

Lord POLWARTH having expressed his willingness to accept the motion as thus altered, it was unanimously adopted.

The Marquis of LOTHIAN, in declaring this finding, said he was quite sure the meeting generally was not in favour of striking off Inverness and Kelso. His own opinion was that, if possible, other places might be included in the circuit; and if any district which thought it had a right to be visited were to send in a requisition to the directors on the subject, he had no doubt it would be duly considered.

The Earl of DUMFRIES next moved:—"That this meeting approves of a general meeting of members being held annually at the place and time of holding the summer show, and remits to the directors to make the necessary arrangements for having such a meeting at Perth in last week of July, 1879."

After a discussion this was carried.

On the motion of the Rev. Mr. GILLESPIE, it was unanimously agreed:—"That a committee, composed of directors and other members of the Society, be appointed to consider and report what improvements, if any, can be made in the transactions of the Society, and especially whether any change in the present mode of procuring papers for publication can be introduced with advantage—the report to be made public before the general meeting of the Society in January, 1880, with the view of its being disposed of at said meeting."

Mr. MILNE, Niddrie Mains, reported that the following premiums had been awarded in 1878:—"£25 to John McCulloch, Denbie Mains, Lockerbie. £10 to John Scott, 28, Gloucester Street, Regent's Park, London, N.W. The medium gold medal, or £5, to John Ainslie, jun., Hillend, Loanhead. The medium gold medal, or £5, to George Grant, Alimichir Dufftown, Banffshire. The medium gold medal, or £5, to Thomas Lawson, Sanddyford, Kiriemuir. £5 to Professor Tanner, Abergeldie, North Wales."

In the Forestry Department the awards were:—"The gold medal, or £10, and the medium gold medal, or £5, to Robert Hutchison, of Carlowie, Kirkliston. The medium gold medal, or £5, to William Sealing, Old Manor House, Balford, Notta. The medium gold medal, or £5, to the Author of a Report of the cause of Ring-shaking in Trees, with the motto 'Excelsior.' The minor gold medal to John M. Aitken, 24, St. Andrew's Square, Edinburgh."

Captain TON, of Howden, reported that, in consequence of the Society's petition to her Majesty for a national charter for Scotland empowering the Society to grant veterinary diplomas having been refused, the directors, as had already become known, considered it impossible to continue to grant certificates in the Veterinary Department.

Dr. AITKEN submitted a report with reference to the working of the Society's experimental stations at Pampherton and Harriaw, both of which were under turnips. The leading observations made for the year were:—"Regarding the various applications of phosphates, it was noticed that the dissolved phosphates took the lead from the first, and main tained it all through the season; but the difference was not great, averaging, perhaps, between one and two tons per acre. These plots were all very much alike, no matter what was the source of the phosphate. The same is true of the plots with undissolved phosphates, except the bone-dust plot, which was very backward. Of the nitrogenous manure, the nitrate of soda and sulphate of ammonia plots were exactly on a par. The one manured with shoddy was very backward, and that manured with dried blood, although very slow to begin, improved latterly with great rapidity, and was in the end equal to the best. The plots containing no nitrogen did badly, especially at Pampherton. The potassic manures tried were only two—sulphate and chloride; and the plot manured with sulphate of potash was decidedly better than the other on both stations. The want of potash did not seem much to affect the growth; but those plots manured with potash ash alone were very poor, especially at Pampherton, where it was the worst plot on the station. On both stations the plot with sulphate containing 30 per cent. soluble phosphate of lime gave a better crop than that containing 10 per cent. soluble and that containing 30 per cent. insoluble. Regarding the experiments with various quan-

ties of manure, it was uniformly found that those plots most abundantly manured gave the best crops. The difference in time of sowing exerted a marked influence on the crop, those first sown being larger. The effects of thick and thin sowing were also very apparent; that which was thin sown made a better crop. A fortnight after thinning it was very evident that the thin-sown seeds had made better roots and had a sturdier growth. The draught at Pampherton seemed to tell most on the plots with undissolved manures, and especially on those containing fatty matter, such as bone-dust, shoddy, dried blood, and also rape cake and cotton cake, the latter of which was not equal to the former."

Mr. MELVIN, Bonnington, remarked that the result of these experiments was interesting, as strengthening very much the opinion held in his own district as to the great value of nitrogen and dissolved bones.

Mr. HOPE, Leith, suggested, in connection with this subject, that a committee should be appointed to consider how the members of the Society could be put in possession of the advantages at present enjoyed by members of local analytical associations.

This suggestion was agreed to.

## LEICESTERSHIRE.

A general meeting of the members of this Society was held at the Bell Hotel, on January 11, Major Freer presiding.

After the Secretary had read the balance sheet and report, Mr. GLOVER suggested that about £100 should be offered as an inducement for the exhibition of good stallions. The prizes should, he thought, be given in the spring of the year, with the stipulation that the winning animal should attend the annual exhibition of the Society, and that each member who paid a subscription of £1 l. and upwards should be entitled to its services. Mr. Glover also suggested that the Society should secure the services of an analyst, from whom the members of the Society might ascertain the quality of manures and cakes free of charge. He also advised the holding of two wool fairs yearly for the purpose of creating a healthy competition in an open market, Leicestershire being a wool-producing county, and a great desirability existing for buyers and sellers to be brought more into contact with each other.

The proposition was carried.

The consideration of the place where the forthcoming show should be held was adjourned; but the days fixed were the 30th and 31st of July.

## WAGES OF THE DEVONSHIRE LABOURER IN THE

SIXTEENTH CENTURY.—The incidental notices of the cost of provisions and labour are not the least interesting items in ancient records—the maximum rate of wages being settled by the justices from time to time, and regulated according to the value of corn. It has, we believe, been generally estimated that a labourer received somewhere about the price of two bushels of wheat for a week's work; but, as a matter of fact, the price of provisions fluctuated, while the rate of wages stood still. A Devonshire farm labourer in 1592 was paid 3d. a day, with meat and drink, or 7d. a day without, during the winter months, and 4d. and 8d. respectively in the summer months, exclusive of special payments at harvest time. If we give him an average weekly wage of 4s. 6l. we shall be rather over estimating than under-rating his earnings, which on the whole, compare favourably with those which have been paid in some parts of Devon within the last ten years—namely, 7s. or 8s.—*Academy*.—[Where have the earnings been so little within ten years?—Ed. M. L. E.]

CLOVER AS A HUMAN FOOD.—According to Hon. J. Stanton Gould, clover has been used as human food for generations by the Indians of the plains. The Digger Indians of California eat it raw, and also cook it by placing a thick layer of green clover between stones that had been previously heated. When young onions or chives and grasshoppers are mingled with the clover, the dish is considered as a great luxury. The Apaches mingle together clover, pigweed, and dandelions in a vessel, which is then filled with water. Stones that have been heated in the fire are then thrown in, and when they have imparted their surplus heat to the water they are taken out and replaced by hotter ones, until the mass is sufficiently cooked.—*Farmers' Advocate*.

## Farmers' Clubs.

### BLANDFORD.

A general meeting of the members of this Club was held on January 11th. Mr. G. Galpin took his place for the first time as Chairman for the year; Mr. J. T. H. Scutt was unanimously elected Vice-Chairman; Mr. E. O. Richards was re-elected Secretary, and Mr. Cox-Bartlett auditor.

In a discussion of the Weights and Measures Act which followed the transaction of the business of the Club, the CHAIRMAN said it appeared to him desirable to take some action in the matter, and to press for an uniform standard of weight for the whole of the country. On taking up the *Mark Lane Express* he found in America corn was sold by the cental, at Liverpool the same, at Birmingham by the bushel, and at various markets by the quarter, stone, or bushel, so that one got bewildered in calculating the prices at different markets. There appeared to him to be a great need of uniformity, so that in quoting one market all would be quoted. According to the Act it appeared it would be illegal to say 6s. per stone, but they might say 6s. per 8ib. What he wished to put before the meeting was whether it was necessary to come to some definite resolution on the subject. At several meetings of Chambers of Agriculture the adoption of the cental has been recommended, but he noticed a deputation from Manchester (where it had been decided to sell all grain by 100lb. weight), who attended at Whitehall Gardens, were told it was not intended to make the adoption of the cental compulsory. The 100lb. standard would be legalised. He certainly thought it most desirable to have greater uniformity in the sale of dry grain; whether it was by the use of the bushel, or quarter, or cental, was another thing.

Mr. T. H. SCUTT said he fully agreed with Mr. Galpin there should be uniformity. He was for setting by the cental, but objected to it except it was made universal all over the country.

Mr. C. RICKMAN remarked it was a curious thing that in Scotland if wheat was not struck by the quarter Imperial measure the party was liable to a fine of £5 under the provisions of the Act.

Other members took part in the discussion, but no resolution was passed.

### DORCHESTER.

At the last meeting of this club, held on January 11, Mr. Day, Medical Officer of Health for a portion of Dorchester Union, gave a lecture on "The Sewage Difficulty," in which he described the different systems of sewage in use, and concluded by quoting a question of Dr. Letheby's, asking whether we are not altogether wrong in removing our sewage by the agency of water.

### I X W O R T H.

A meeting of this Club was held at Ixworth on January 14th, Mr. T. Thornhill, M.P., in the chair. Dr. Stevens read a paper on "Healthy Dwellings," in which the ill effects of overcrowding, want of ventilation, bad building, impure water, defective drainage, and other imperfections were referred to.

## Chambers of Agriculture.

### BEDALE.

The quarterly meeting of the Bedale Chamber of Agriculture was held on Jan. 14, when the PRESIDENT (Mr. C. Clarke, of The Hermitage) read a paper on "Agricultural Depression: its Causes and Remedies." In the course of his remarks he said: The subject for discussion was one upon which not much could be said that was not unfortunately too well known and felt by those whose homes were dependent upon agriculture. The profits from farming were almost nil, and, as a consequence, there were more farms to let now than ever there were in any previous year. Many of the poorer class of farms were already in the hands of the landlords: several landowners were either lowering their rents or returning five, ten, and in some cases fifteen per cent. That this state of things could long continue without seriously affecting the

landlords, and ultimately the shopkeepers, and those dependent on the home trade, was an utter impossibility. After referring to the great increase of foreign competition, Mr. Clarke went on to say that there were a number of minor matters which bore unfairly upon the British farmer, and required attention; though small in amount in each case, when taken together they amounted to something considerable. He instructed the system pursued by railway companies in the carriage of grain. Foreign corn was carried by rail from Hartlepool to Leeds for a less rate by 1½d. per bushel than they would carry home-grown from Bedale to Leeds, half the distance. Again, they would carry foreign corn from Newcastle to Newark for a less rate than they would carry English grown from Leeds to Newark. He gave these as examples of what he conceived to be unfair treatment. In the distribution of this foreign produce our country roads were chiefly the medium—roads which were maintained in a great measure at the cost of the British farmer. There were 13 million quarters of breadstuffs, also great quantities of maize and other corn, to which might be added cattle, sheep, swine, &c., and, in fact, millions of tons which were moved from place to place over our public roads, free of cost so far as to the maintenance of those roads. The profits from this foreign produce were not available for either roads or any other local institution. From these causes he had no doubt but that the foreign producer had an advantage of from 1s. 6d. to 2s. over the British farmer. The malt tax was said to amount to seven millions per annum. The question which suggested itself was, if this tax were removed would more barley be required, and if so, would that extra demand cause it to be dearer? If so, it was clear that the tax was an injury to the farmer. In reference to this question, it seemed hard upon the farmer that he could not convert his corn into malt. A manufacturer of cloth would consider it a great hardship if, after he had made his cloth, he was compelled to pay a heavy duty (about half its value) before he was allowed to convert it into garments. He had heard the late Mr. Booth speak highly of the qualities of malt as a feeding stuff for cattle. It was well understood that cooked food assimilated with the system more quickly than food in its raw state—instance the difference in the feeding qualities between raw linseed and linseed cake. The next question which should have a place here were the rents, tenure of land, freedom of cropping, &c., but as these questions had been already discussed in the Chamber, he only noted that he trusted landlords would, when the necessity arose, lower rents, and meet their tenants in a fair spirit in regard to the freedom of cropping. The next great question for farmers was that of labour. It was 50 per cent. higher than what it was twenty years ago, and was admitted on all hands to have greatly deteriorated. They were led to expect great results from the Government system of education. One thing farmers must not expect to get was those sturdy, sledge-hammer, plodding helps as of yore; but instead men of more intelligence and better capable to handle those labour-saving machines, which must become the order of the day if farming was to be continued as a successful business in England. Imperial and local taxes pressed heavily upon the occupiers of land, and should be revised. He did not wish to discuss a question which had been so often before the Chamber, but to draw their attention to two matters which would in some degree relieve those rates. Four thousand vagrants passed the Bedale union annually. They had food and lodging supplied them at a cost, he would suppose, of 1s. per night, including necessary expenses, or £200 per year; their earnings, of course, would be set off. Other unions, no doubt, were burdened in the same way. The question which naturally suggested itself was, why were those vagrants kept at the cost of the ratepayers only? They owned but a small portion of the national income. They might reasonably conclude that vagrants were national, and not local "wags and strays," and as such should be maintained out of the national purse, and under the supervision of the police. The question of how to diminish our disgraceful and woful pauperism has been ably answered by the Rev. William Lewery Blackley, in an article in the *Nineteenth Century* for November last, entitled "National insurance: a cheap, practical, and popular means of abolishing poor rates." It was laid down as an axiom, "that to make reasonable provision against occasional sickness and the inevitable feebleness and infirmity of old age is the duty of every man gifted with health and strength, and in a position to earn by his daily labour a wage from which such provision can be made." Again, he states, "The argument against making

no provision is: Why should we save? The parish must keep us at a pinch. We have a right to be supported by the rates, *i.e.* by the thrifty; and they are right in law, though not in equity. For though the Guardians may see a man to-day burn a fifty pound note, they cannot refuse to receive him into the workhouse to-morrow if he apply as a destitute person. That this improvidence is mean, base, and disgraceful is true, but far worse is the fact that it is common, and no legal remedy exists for it at the present time." He further states "That a pound a week is at the present time no unreasonable estimate to make of the average earnings even of a labourer. But to put it beyond cavil, let us place the average wages of a man of twenty at 15s. per week, or even less. If on these wages hundreds of thousands support themselves, their wives, and families, none will deny that a young bachelor, as, if he will, live, and live well, on 9s. If he would exercise just so much self denial for one single year, he might by one payment of £13 secure for himself in sickness to the amount of 8s. per week till he reach 70 years of age, and a pension of 4s. a week from that age until death." Thus, we see there is a period in the life of every working man in which he can, if he will, render himself independent, during his whole lifetime, of parochial relief." Is again referring to agricultural depression, they all knew too well it was a great fact—its chief causes were too patent to be mistaken. The relief they might hope to get was but little, but they must not cease their exertions on that account. Where a burden was placed wrongly upon them; they must seek for its removal. First it could not be right to give the foreigner the advantage in the carriage of corn, neither was it right for the farmers to fund roads for them to carry their produce. In regard to the malt tax, if it acted injuriously, let it be removed. Again, rents and land tenure must be rectified. Also the labour question; and as regarded the present maintenance of vagrants, it was a great wrong. In reference to compulsory national insurance, if carried out—and he saw no objection to it—it would be the greatest revolution our old island had ever undergone, and one for good, as the working public would have a stake in the country—they would be citizens in fact.

### BUCKS.

A meeting of this Chamber was held at the George Hotel, Aylesbury, on Jan. 15. Mr. J. Treadwell presided, in the absence of the chairman. The meeting was for the transaction of the annual business; at the close of which a discussion took place on "The working of the Elementary Education Acts," and a resolution condemning the enforcement of the fourth standard as a test of efficiency, and asking Government to reduce it to the third standard, was passed unanimously.

### DEVON.

The annual meeting of the Devonshire Chamber of Agriculture was held at Exeter on Jan. 17, Earl Fortescue, the president, in the chair. His lordship was re-elected, and, in returning thanks, said the interest of the land owner and the land occupier were, if well understood, identical in the long run, and it was of great advantage that they should have an opportunity of meeting together to discuss questions of common interest.

### EAST RIDING.

The annual meeting of this Chamber was held on January 11, at Beverley, Mr. J. Lee, of Gardham, presiding.

The Secretary, Mr. T. TURNER, read the report of the past year, which stated that the committee had not to record any very marked progress in legislation, so far as the agricultural interest was concerned. The report was adopted.

The election of officers for the ensuing year resulted in the appointment of Mr. Lee as president, Mr. Fisher (of Leconfield) as vice-president, and Mr. Tom Turner as secretary and treasurer.

**PRINTERS' ERRORS.**—The editor of a country paper wrote one evening:—"To day is the anniversary of the death of Louis Philippe." When the printer's proof came up, the name read "Sam Phillips." The editor wrote on the margin, "Who the deuce is Sam Phillips?" Next morning the article read:—"To-day is the anniversary of the death of Sam Phillips. Who the deuce is Sam Phillips?"

## Agricultural Table Talk.

At the annual dinner of the Berkshire Chamber of Agriculture, held at Newbury on January 9, Mr. Walter, M.P., said:—"One of his motives for coming there was to express the regret he felt for what he believed to be a partial agricultural distress in that county, and to express his admiration he unaffectedly entertained for the manly and patient manner in which it had been met. (Hear, hear.) He thought there was a remarkable contrast worth pointing out in the way in which events of this kind were met now by farmers and all other agricultural classes in the present day as compared with what was the case 30 or 40 years ago. Those who could remember the Parliamentary debates of that time, about the year 1836, would remember that the pages of *Hansard* were filled with long reports of debates on agricultural distress. That was the time when high protective duties on corn existed. He attributed the better temper and the more manly spirit with which these periodical occasions of depression were borne to the education which the agricultural interest had gone through during the intervening period. It was now rather more than a generation ago since the agricultural interest had to learn what was then a very hard lesson. They had been taught to consider the protection of what was called native industry, chiefly that of agriculture, as a principle deeply rooted in the Constitution, inculcated by statesmen of the greatest eminence like Sir Robert Peel. They had suddenly to be taught by the hard logic of facts and by the inexorable experience of the human stomach that all these favourite and long-cherished doctrines were to be separated and scattered to the winds, and that by the very men who had spent the best part of their lives in promulgating the opposite doctrines. Since that time we had had no more complaints made to Parliament of agricultural distress, or the slightest idea entertained that it was a question that any longer lay within the reach of human legislation. That lesson the farmers had learnt—and he believed they had thoroughly imbibed it and was part of their settled conviction. He knew that both in this country and neighbouring countries many landlords had of late been suffering through having farms thrown on their hands, especially in the corn-producing districts; but he was told that in the dairy districts times had been fairly and reasonably prosperous, thereby showing that agriculture had many compensating advantages, and if one species of crop failed the land was capable of being turned to other productive purposes. We were very far indeed from exhausting the capabilities of the soil and turning them to profitable account. He, as a landlord, was not one who felt much panic or alarm as regards the prospect of a serious reduction of rents. He could conceive it quite possible and probable that if in the corn-producing districts a permanent fall in the price of corn should occur a reduction of rents would follow as a matter of course. On the other hand, it was well to bear in mind that over a great part of England, and notably in metropolitan counties and in the neighbourhood of great towns, there was the great residential value of land at the back of the agricultural value, and that a vast deal of land was let, he would not say below its agricultural value, but below the rent of it if dealt with as an investment. Land which in many places might not be worth more than 25s. or 26s. per acre for agricultural purposes would, if sold, probably produce 35s. or 40s. per acre; so if landlords thought there would be a permanent depression in the annual value of their land they would naturally turn their attention to the other capabilities of that land. They would find it far more profitable to divide their farms, lay them down in grass, put up better buildings, and get their rent in that way. He had in his own hands a good deal of land precisely of that character. Another point was, how large a proportion of the rent of land was really due to the landlord's expenditure for buildings on the farm? This question was one that had been ably treated by various writers on agriculture. He had some personal knowledge of the subject, but was not prepared to say at all what would be a fair estimate of the proportion which the rental of farm houses and buildings and cottages—which were essentially a landlord's creation—bore to the whole rental of the land. He thought it would not be unfair to put it at least at one-third of the rental if they considered the cost of erecting good farm-houses and buildings such as a farmer of the present day required. With a proper supply of cottages

for a farm of 300 acres he thought they would agree with him that it would be very difficult to do it for less than £2,500. Now, taking it at 26s. per acre, that would be a rental of £380 or £390, of which £150 went directly for interest on buildings, leaving a residue of about 18s. per acre for what the landlord actually paid. Then came this question. Supposing that sum to be materially reduced, the landlord would consider what it would pay him to plant it. If the land would not pay £1 per acre it would be cheaper to put it into any form of cultivation. It must be borne in mind that if the margin of the rent which really belonged to the land was reduced much below £1 per acre, to take what some might think an extreme case, a vast deal of land now in cultivation under the plough would have to be planted; therefore, that was one point which the portion of the landed interest known as the landlords would have to take into account when they had to consider the possibility of having to meet a reduction of rent. Mr. Darke, who had spoken just now, had referred to the question of labour, and expressed his opinion that agriculturists would not get better times until they could get cheaper labour. That, again, was a delicate question, to which he was not prepared to give a definite answer; but it must be borne in mind that low wages did not by any means represent cheap labour; on the contrary, they knew very well that a great deal of cheap labour so-called had been sent or had emigrated to the North of England, where it had been found so dear that it had to be sent back again. Therefore, it was not a question of the money wage of labour, but of the amount of work that could be got done. The real hardship the farmers had had to encounter was, as Mr. Clare Sewell Read had put it, that not only had wages advanced, but that labour had diminished. The real and difficult problem for the farmer to solve was how to get anything like a proportionate return of labour for the wages paid. The agricultural distress was unfortunately but one portion of the distress that prevailed in the country at the present time; other branches were also greatly affected. What they had to consider was the cause of this distress. They knew that the iron trade was paralysed, that coalowners were making no money; that the cotton industry had seriously diminished, and that other branches of industry were greatly suffering in consequence of that state of things. He apprehended that with regard to the distress and depression in the iron trade a good deal of it must be attributed to the cessation of the demand for rails which prevailed so enormously after the American war. That had now subsided, and there was no prospect of any immediate return. The coal industry naturally followed upon the iron, because 40 per cent. of the output of coal was consumed in the production of iron; and though they profited as consumers, the producers naturally suffered. No doubt, also, a part of that depression might be truly attributed to the general uneasiness which had prevailed for the last two years on account of the state of affairs on the Continent. There could be doubt that the anxiety with regard to the Eastern Question must have contributed very largely to paralyse the industry of the country and make people unwilling to embark in enterprises. Here he was trenching on the forbidden ground of politics. He was, however, unable to con-  
 forcure altogether in that view, because as between the two great parties in the country the foreign policy was one which did not appear to come in the category of party politics.

At Diss, on Jan. 10, Mr. C. S. Read, referring to the legislation introduced by the Government, said it had not been much, and he could not say it was altogether satisfactory, the reason for which was twofold. First, on account of the time occupied in foreign affairs; and, secondly, by reason of the very great obstruction, especially by the Irish members, some of whom were determined to oppose any kind of legislation. He commended the Weights and Measures Act as likely to give honesty in trade. The Highway Bill he considered as not likely to operate well, as it would be extremely difficult for Quarter Sessions to work satisfactorily. The Cattle Diseases Act he considered the most satisfactory of the session, and was but the carrying out of an idea repeating which he was forced to leave the Government. He believed there was now a prospect of their flocks and herds being protected from foreign disease. He condemned the Valuation Bill, and said he should always do so as long as it gave such unbounded power to the surveyors of taxes in the preparation of their parochial assessments. This officer would always have an

immense power in the assessments committee, and the result would be to raise everybody's assessment to a level of some man who had given a great deal more for land than it was worth. He rebutted the charge that had been brought against the Government of having by their policy brought about and caused the present distress. For his part he could not see what they had done to assist the distress. If a European war had taken place, it would have accumulated the distress; but, by the action of the Government, such a terrible curse had been averted. It was too well known that they as agriculturists had had four very unfavourable seasons. He considered the last as bad as any of them, and the farmer had less return for his money per acre than in many previous years. He asked what had the Government to do with favourable or unfavourable seasons. He thought it really despicable and idle on the part of their opponents to accuse the Government of having caused the distress, when there was no doubt the primary cause was the unfavourable seasons. There was no doubt that foreign competition had had a great deal to do with it. They had had Free Trade for thirty years, and during this time the resources of other countries had been developed. Every new line of railway, every emigrant that left our shores, did something to accelerate that competition, especially in America. He did not care for competition from any part of the world except America, as that nation was going to ruin farmers in every country, but this country would be the last, as they had a good home market to help them, whereas other nations had to send a great part of their produce here. If they looked abroad they saw other countries raising their tariffs, and even their own colonies were protecting themselves against the manufactures of England. Some people had advocated for this country protection under the name of reciprocity, but as farmers had no protection for their produce, they were not likely to allow any or the manufacturers.

Earl Stanhope on Jan. 17 presided at the annual dinner of the Sevenoaks Farmers' Club and Chamber of Agriculture, held at the Crown Hotel Assembly Rooms, Sevenoaks. Sir Charles Mills, in acknowledging the toast of "The County Members," referred to a paper which had been read before the club by Mr. A. R. Hill, on the agricultural labourers' question, and said that, as in that district there had been but little effect given to the dispute between farmers and labourers in some parts of Kent and Sussex, the question could be discussed in a spirit free from feeling. He perfectly agreed with the suggestion that all who were engaged in common work were entitled to join together for the maintenance of their interests, but it was to be regretted that in the case of the labourers' unions here should often be those who had nothing in common with the workers, and he believed that but for this outside influence the late crisis between the farmers and the labourers would have passed off without any display of feeling. The farmers were ready to give a fair day's pay for a fair day's work. Labour was a commodity which was subject to the laws of supply and demand, and the farmers had a right to obtain it at a reasonable price, especially seeing that some years ago, when the price of labour was raised, articles of consumption were at a much higher price than at the present time. With regard to the condition of agriculture he acknowledged that the prospects of the farmers were not very bright, and he did not believe that the proposed reduction of rents would remedy the evils of which the farmers complained, adding that landlords had not been receiving as rents all they might have obtained, considering the great competition there had been for farms. On the subject of "reciprocity," he held, with Mr. C. S. Read, that protection could not again be imposed upon this country. He supported warmly the provisions of the Cattle Diseases Act. In regard to the legislation of the future, he mentioned the proposed Valuation Bill and the County Government Bill, and expressed his readiness and the readiness of his colleague to give effect to any suggestions which the constituents of the division might offer. The Chairman, in giving the toast of "The Club and Chamber of Agriculture," said he did so with mingled feelings of regret and satisfaction—regret at the unprosperous time for the farmers and satisfaction at seeing the goodly company on that occasion. The depression in trade and agriculture was to be chiefly attributed to war

and to the unsettled feeling in regard to the East, and he looked forward hopefully to the spring, as there was every reason to believe that Russia would carry out the Berlin Treaty, and by withdrawing her troops from the territory now occupied give Europe hopes of peace. As to the assertion which had been made that the depression at the present time arose from "over-speculation," he was quite sure that they had not been going too fast in that part, and that there was room for going faster. He regarded it as idle for men to look to "reciprocity" for a remedy, as for one thing, the people of these isles would not be able to find food if they did not have free-trade in the products of the earth, and if the farmer could not have "protection," then the agricultural classes were not to be taxed in the articles they required by "reciprocity" being afforded to others.

Mr. JOHN TREMAYNE, M.P., at the annual dinner of the Wadebridge Farmers' Club on Jan. 14, said:—Looking over the measures which had been passed during the last Session, one could not fail to be struck with the fact of how many of them directly interest or bear upon the agriculture of the country. For example, the Contagious Diseases Animals Act was one which required an immense deal of discussion, because it raised the very great question whether any impediment placed by the legislature upon the import of live animals from abroad was not a reversal of the policy which had been tried and approved of by this country—the policy of free trade, and somewhat approached the old system of protection. There was a great deal of talk about that, and he thought the discussion very clearly proved that the agricultural interest wanted no protection—nothing in the shape of protective duties to assist them in their profession; all they asked was legitimate protection against the introduction of disease from foreign countries. He expected they would hear about protection again next year. They had rubbed it up, and painted it, and varnished it, and they now called it "reciprocity." But he did not think they would hear anything more than words about it. It was very distressing indeed to know that there was hardly a trade, or an interest, or a profession in England which was not suffering deeply at this present minute; but he believed all people, of whatever political opinion, had come to the conclusion that a return to the old system of protection is a thing which never can be seen in this country again. There was another Act of Parliament which, though a simple one, was a very wise Act—the Act subjecting thrashing machines to be protected in such a manner as to secure persons about them against injury. The Adulteration of Seeds Act was one that told upon the farmer far more fully than one was at first led to suppose. The Weights and Measures Act was another which was much needed, and which will be of immense advantage to the community in simplifying all its transactions by weight or measure. They also had a long discussion on the Highways Act. Several gentlemen had heard something about it last. He rather thought he had heard something about it himself, and he thought he should hear a great deal more about it to-morrow. Well, now, that was not a perfect Act; there was no doubt about it; but nearly all the imperfections of the Act itself have been lost sight of in Cornwall in the imperfections of the committee that was entrusted with drawing up by-laws under the Act. There was no doubt that there were imperfections and omissions in the Act which will have to be remedied next year. And he thought they must look upon the Highways Act as part of an Act which will eventually become incorporated in one of much wider scope and operation, namely, in the County Government Act. There was no doubt whatever that all these Acts of Parliament relating to the government of local institutions will be centralised and brought into the nucleus of the local governing body of each county. For himself he did not regret that the Local Government Bill was not passed last year. The discussions which had taken place would, probably, lead to much sounder and better legislation than if they had hurried such an Act of Parliament through when the country was engrossed in foreign troubles. He had no doubt that the Bill would be one of the first the Government would deal with in the coming Session.

**DIPHTHERIA AND KEROSENE.**—The *Summerside Progress* reports the cure of several cases of diphtheria by syringing the throat with kerosene oil.

## THE RAINFALL FOR TWENTY YEARS.

The following table, contributed to the *Bury Post* by Mr. P. Grieve, of Culford, near Bury St. Edmunds, shows the rainfall at that station in each month for twenty years:—

RAINFALL IN INCHES.											
Yr.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1859	0.88	1.04	1.30	2.49	3.32	3.40	3.37	1.72	2.29	3.34	1.56
1860	2.33	1.23	0.93	0.93	3.93	4.69	1.81	5.40	2.67	1.59	2.38
1861	0.79	0.51	1.77	0.77	1.00	2.62	2.64	0.53	1.16	1.03	0.47
1862	2.10	0.41	2.40	1.41	2.44	3.25	2.20	2.27	1.41	2.67	1.33
1863	2.36	0.52	0.82	0.72	0.99	2.69	0.78	1.91	2.39	2.67	1.20
1864	0.83	1.36	3.09	3.06	2.66	1.04	0.49	0.59	1.37	1.11	2.84
1865	2.77	2.46	2.16	0.28	1.96	1.20	4.01	8.94	0.34	7.22	1.59
1866	2.48	3.59	1.80	1.55	1.66	3.49	2.25	3.39	3.01	0.51	2.66
1867	2.73	1.82	1.47	3.17	2.65	0.73	4.49	1.49	2.63	2.45	0.95
1868	2.69	1.65	2.05	1.66	0.66	1.17	0.22	1.98	1.74	2.62	1.37
1869	2.08	2.49	1.87	1.33	2.33	1.71	0.46	2.25	3.58	2.78	4.84
1870	0.89	0.78	1.87	0.76	0.36	0.98	0.20	1.77	1.58	3.03	0.89
1871	1.08	2.07	1.47	3.70	3.36	3.30	2.93	0.99	4.40	1.41	1.52
1872	2.83	0.90	2.50	1.86	2.53	0.21	6.21	2.49	2.35	3.12	4.01
1873	1.91	1.88	1.66	1.31	2.07	2.50	2.23	2.19	2.72	3.67	2.00
1874	1.24	0.71	0.86	0.49	1.64	0.76	1.18	3.14	2.05	2.69	2.17
1875	2.34	1.21	0.47	1.05	2.16	2.83	5.29	0.68	2.67	3.24	5.26
1876	1.80	2.59	2.10	2.27	0.70	9.75	1.39	1.71	4.45	0.84	2.59
1877	2.93	3.05	2.62	2.29	1.54	1.53	3.11	2.78	1.40	1.34	2.77
1878	1.81	1.23	1.10	1.23	4.73	1.07	0.69	4.28	1.40	1.92	5.16
Total	38.74	34.54	36.98	50.09	44.49	44.48	47.31	43.01	47.00	48.59	50.20

## THE AGRICULTURAL DEPRESSION AND ITS REMEDIES.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—Allow me to point out a few of the disadvantages which British farmers suffer under, and to remark on the means of improving their position.

1. It seems very hard upon us British farmers to grow corn and be taxed for almost everything we keep, buy, or use, whilst the foreigner can grow and send it to this country almost untaxed. I see no cause why they should not help to pay some of the expenses of this great nation as well as feed it, especially as there is so much foreign corn used now to what there used to be thirty years ago, when it was almost a crime for a miller to use a sack of foreign wheat. Now they use more than half.

2. I must call attention to the unfairness with which the tithe averages are taken when the Tithe Commutation Act came into operation. I think it was in 1849. It was intended that the average should be levied on all the corn the farmer grows, but things have very much changed in thirty years, and the farmers keep double the stock they did then, and consequently feed out all the worst corn they grow, which this year I am sorry to say amounts to nearly or quite half they grew. Why should not each farmer make his own return? Most of the corn goes from the farmer to the merchant; then his profit is added to it, also railway expenses, so that as we are now paying 12½ per cent. more than it was really commuted at—and it was then set very high—we feel it this year, as there is no allowance made for damp and inferior corn.

3. I should like to see the Malt Tax repealed. If our Exchequer cannot share all this large sum it might be put on beer that is sold by brewers or retailers, tobacco and cigars. We should then see every poor man brew his own beer at home, and take his day's allowance to his work with him, or enjoy it at home with his family. This would do away with most of the little beer sellers that are now a nuisance and a curse to our towns and villages.

4. Our parochial rates are, I consider, very unfairly levied, inasmuch as they press too heavily on the agriculturalist and the clergy. The farmer has to pay on every rod of ground he holds, which is his trade by which he has to get his living. It is the same with the clergyman, while the tradesman is only rated on his premises, which amounts in many cases to only a few shillings. He may be doing a large trade of some hundreds or thousands a year; yet his living or trade is not rated like the farmer's or the clergyman's. The same remark will apply to any other profession or calling, or to the wealthy landlord or squire who may be living in our towns or villages, and who wants labourers, servants, and policemen and roads as much as the farmer does.

5. The Income Tax is a burden on farmers. Where there has not been any income for the last four or five years; they do not know how or like to claim the exemption for fear of being exposed and then broken up at once, neither do half of them know how to claim the exemptions.

6. The School Board Act presses heavily on the agriculturalist as well as the poor in rural districts; it puts a very heavy expense on the land in causing them to build new and large schools, which in most instances are close to one that now would be amply large enough, as the families are constantly emigrating or migrating at different seasons of the year to where employment is more remunerative; it also presses upon families themselves in taking away some that would add to their earnings in addition to the peace they have to pay. It may work well in towns, but not in rural districts.

7. I should like to see a free transfer of land, except the trifling fee of registering it. I see no reason why a registry of each farm or any part thereof that might happen to be sold should not have a title as well as the present expensive mode of conveyance.

8. As to the Weights and Measures Act which has recently been passed, I quite agree with buying and selling by weight and not by measure, but let us keep to our present weights, which are pound, stone, hundredweight, and ton. If we have the cental nearly all our weights will have to be altered, causing additional expense.

I am, Sir, &c.,

AN ESSEX FARMER.

## TITHE COMMUTATION — SEPTENNIAL AVERAGES.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—As the result of the Corn Averages for the seven years to Christmas, 1878, published in the *London Gazette* of this evening, viz:—

Wheat .....	6 6½	per imperial bushel.
Barley .....	4 1½	ditto.
Oats .....	3 3	ditto.

I beg to state that each £100 of Tithe rent-charge will, for the year 1879, amount to £111 15s. 1½d., or 12s. 8½d. per cent. less than last year.

The following shows the worth of £100 Tithe rent-charge for the last seven years:—

	£	s.	d.
For the year 1873 .....	120	15	10½
1874 .....	112	7	3
1875 .....	112	15	6½
1876 .....	110	14	11
1877 .....	109	16	11½
1878 .....	112	7	5½
1879 .....	111	15	1½

The average value of £100 Tithe rent-charge for the 43 years elapsed since the passing of the Tithe Commutation Act, is £102 18s. 1½d.

I am, Sir, your most obedient servant,

MONTAGUE MARRIOTT,

Editor of "Willich's Tithe Commutation Tables."

26, Montpelier Square, London, S.W.

January 7, 1879.

Mr. Marriott has also forwarded to me the following table:—

## ANNUAL AVERAGES FOR THE 52 WEEKS ENDING AT CHRISTMAS OF EACH YEAR.

Year.	Wheat.	Barley.	Oats.
	s. d.	s. d.	s. d.
1872	57 0	37 3	23 2
1873	58 8	40 5	25 5
1874	55 9	44 11	28 10
1875	45 1	38 5	28 8
1876	46 2	35 2	26 3
1877	56 9	39 8	25 11
1878	46 5	40 2	24 4

**OSTRICH FEATHERS.**—The increasing production of ostrich feathers on the South African farms, combined with a falling off in the demand at home, has led to a decline in the market rates for this produce at the colonial sales. Feathers of superior quality, however, fetch high prices. At a recent sale at Grahame's own, 13 splendid "primes," or perfect white feathers, realised a guinea each, or at the rate of £145 per lb. The average price for fine white feathers was £40 per lb., while blacks realised about £14, and drab or fancy colours only £1.—*Times*.

## FAILURES.

The following is the number of failures in England and Wales published in *Kemp's Mercantile Gazette* during the six months ending Dec. 31st, 1877 and 1878.

1877.		1878.		Increase.
July		July		
5	204	4	232	28
13	236	11	239	3
19	219	18	241	22
26	203	25	238	35
Aug. 2	227	1	236	8
9	175	8	215	40
16	198	15	227	29
23	194	22	271	77
30	194	29	257	63
Sept. 6	213	5	256	43
13	186	12	232	36
20	194	19	199	5
27	167	26	237	70
Oct. 4	201	3	204	3
11	211	10	261	50
18	209	17	299	91
25	237	24	293	55
Nov. 1	206	31	258	52
8	227	7	288	61
15	213	14	253	40
22	214	21	320	106
29	224	28	315	91
Dec. 6	243	5	333	90
13	283	12	340	57
20	237	19	271	37
27	248	26	313	64
5562		6818		1256

The total numbers of failures in England and Wales for the years 1877 and 1878 were:—

In 1877 .....	11,247
In 1878 .....	13,630

Increase in 1878 .....

2,383

The statistics of failures in England and Wales for the whole period from the first issue of *Kemp's Mercantile Gazette* to the end of 1878, are as follows:—

Year.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.
1867 .....	3961	4081	3855	4233
1868 .....	4091	4131	4139	3501
1869 .....	3919	3997	3495	3207
1870 .....	2804	1589	1773	1985
1871 .....	2143	2191	1837	1994
1872 .....	2192	1980	1795	2145
1873 .....	2354	2299	2054	2357
1874 .....	2193	2423	2339	2290
1875 .....	2331	2277	2133	2453
1876 .....	2744	2573	2670	2861
1877 .....	2829	2856	2610	2952
1878 .....	3439	3373	3069	3749

**PRICES OF WOOL.**—The average price of English half hog wool for the ten years ending 1820, was 16½d. per lb. for a similar period ending 1830, 13d. per lb.; ten years ending 1840, 14½d.; ten years ending 1850, 11½d.; do. 1860, 16d.; do. 1870, 21d.; in 1878, 15d.; and the average 1871-78, 20d. The average for 68 years was 15½d. per lb., and present value 13½d. per lb. The highest price was 27d. in 1873, and the lowest 10d. in 1849. The yearly averages of English hoggs and wethers was—1865, hoggs, 27d., wethers, 24½d. per lb.; 1866, 26d.—22d.; 1867, 20½d.—17d.; 1868, 19d.—15½d.; 1869, 20½d.—16½d.; 1870, 18½d.—15d.; 1871, 22½d.—20½d.; 1872, 26½d.—25d.; 1873, 26½d.—22½d.; 1874, 23½d.—18½d.; 1875, 22d.—17½d.; 1876, 18½d.—16½d.; 1877, 16½d.—15½d.; 1878, 15½d.—14½d. per lb.—*Leeds Mercury*.

**FEMALE COMPOSITORS** are not employed on this journal; we tried them, but one morning on opening the door unexpectedly, we heard a smack as though a mule had suddenly pulled his foot out of a mud hole, a flutter, and a rush—no; it didn't answer.—*Paper and Printing Trades Journal*.

## SOME NOTES ON FOREIGN CATTLE.

At the last meeting of the Newcastle Farmers' Club, Mr. Thomas Bell, the Secretary, read a lengthened paper on "The Paris International Congress and Exhibition," from which we extract the portion relating to the live stock.

The seventh volume of the official catalogue of the Paris International Universal Exhibition forms the catalogue of what it terms a temporary exhibition of live animals. This great international cattle show was thoughtfully arranged to be held during the meeting of the Agricultural Congress. Visitors had thus the opportunity of seeing the best specimens of nearly all the distinct European breeds of cattle and sheep. It was a magnificent show of the highest interest to the agriculturist. Many English visitors I fancy would meet with a surprise when they saw some of the fine cattle exhibited from countries whose breeds and productions we, on this side of the Channel, are a little prone to despise. There were no fewer than 1,700 entries of cattle, and empty stalls were not numerous. Out of compliment to us, I suppose, the first place in the catalogue was assigned to Shorthorns or the "Race Durham," as the French have it. Notwithstanding the high blood and unquestionable merit of some of the animals shown from English herds, to whom went most of the prizes, they did not by any means totally eclipse the other exhibits in this class. The French Shorthorn classes, numbering 138 entries, contained a number of really fine animals, although these classes were curiously sprinkled with beasts which no English farmer would have thought of sending into a showyard. Prizes were offered for nearly all the English, Scotch, and Irish distinction breeds of cattle, but with the exception of Devons and Kerrys, in point of numbers these classes were very poorly represented. There was not a single entry in the Channel Islands classes, although so near are their sea-girt homes. Group prizes were offered, open to the whole show, for the best meat producing cattle, the first prize of 2,500 francs was awarded to Mr. McCombie for his grand polled Aberdeens. A similar prize was awarded for the best milk-producing group. This prize was won by Flemish cattle of very large frame, and evidently good at the pail, but many of the critics expressed the opinion pretty freely that this prize should have gone to the black and white Dutch cattle, familiar to most, of which breed there were some admirable specimens, of good substance, with most capacious milk-vessels. The prize for the best cattle for labour was awarded the Limousin breed. These animals are a reddish-brown colour, of medium size, and have great aptitude to fatten, but are no use for dairy purposes. Of all the French breeds, the beautiful white Charolaise seemed to be the universal favorite. They comprise all the qualities for which cattle are prized in France, have symmetrical frames, good grazers, fair milkers, and the best of workers; the Departments where they are raised may well be proud of them. The Shorthorn crosses with French races gave fresh and striking proof of a truth that is now pretty well established, that there are few breeds of cattle that a Shorthorn cross does not improve. It is even open to question whether the working power of their oxen would be at all weakened by the introduction of Shorthorn blood. Mr. Abram Renwick, of Kentucky, the breeder of the famous "Red Roses," which made such fabulous prices, states in a letter dated February, 1877, "I have worked oxen on my farm ever since I have been farming, and the best cattle for the purpose I have used were a cross of Shorthorn on our native cattle, say three-fourths Shorthorn to one-fourth native." There were seventeen distinct French races exhibited, all with well-defined distinguishing characteristics. Whether or not it is that in this case "familiarity breeds contempt," certainly the display of Danish, Swedish and Norwegian cattle so familiar to us in Newcastle Market, did not there present an inviting appearance. The Swiss cattle, with their firm, muscular frames and lively expressions, were great favourites with the visitors. I confess I admired them still more when I saw them in the summer of 1875, snugly ensconced in their native chalets, or making music with their bells on the mountains which keep watch and ward over the never-to-be-forgotten beautiful Lake of Lucerne. The breeds of the south-west of Europe were principally notable for their ugliness. The *Mark Lane Express* said, "One Portuguese beast that obtained a prize should have been fined instead, as an example of all that a bull ought not to be, and there was a Romagnole bull with a most villainous expression, and the



most ungainly proportions of any living animal, not human, in the showyard." We must not, however, lose sight of the fact that most of the Continental races of cattle are raised with a totally different object in view to what we, as meat producers, have ever before us. We previously stated that sheep cultivation had as yet made little headway in France; but in many agricultural districts in Europe, it would be as great a phenomenon to see horse cultivation, tillage operations being carried on solely with cattle. Young oxen command good prices, and are traded for draught purposes, as we do our young horses. This, no doubt, accounts for the fine specimens of bone so often to be seen in our markets for foreign cattle. The small farmers and peasant proprietors, for which France is so famous, do not, however, always indulge even in a yoke of oxen. Many of them have no other beasts of burden than their milk cows, which animals, besides fulfilling their destinies of breeding and milking, are for some years the factotums of the farm, and finally add to the boardings of their owners by being sold for beef. We are told these peasant farmers save money. No wonder. Many of us on this side of the Channel will, in this respect, at the present time, be more likely to envy than despise them. Still I think it will be an evil day for England when stables disappear in any of her districts; when her farmers are reduced to such straits that their milk cows compose their only teams. Macaulay's New Zealander may then safely commence his contemplations on London Bridge, without much risk of disturbance. I must not leave this part of the exhibition without bearing testimony to the universal admiration excited amongst the visitors by the arrangements of the showyard; they were marvels of order, completeness, and I may add artistic beauty. I believe I am not wrong in saying that the first master of English showyard arrangements admitted that our Royal Agricultural Society might even yet live and learn. I must not omit to mention also that the Newcastle Farmers' Club came in for a share of well-merited honour. The Royal Commission, who had the appointment of one English Juror on the list of Jurors who were to award the prizes in the cattle classes, appointed Mr. Jacob Wilson, one of our vice-presidents to this honourable and responsible office. I am sure we all concur in saying they did themselves honour by their selection. As one of the representatives delegated by the Royal Agricultural Society of England, Mr. Wilson was also on the platform of the Agricultural Congress, held in the hall of the Trocadero.

The catalogue informs us that in round numbers there are 26,000,000 of sheep in France. According to our own statistics this year, the total number of sheep in Great Britain is nearly 28½ millions. The Merino breed introduced into France from Spain about the close of last century is said to have gradually absorbed many of the indigenous races, and is believed now to number about 9,000,000. Originally this breed was propagated almost solely for the production of wool—French Merinos are well known to English ladies—the great idea, therefore, was to cover the whole of the skin of the sheep with wool, legs and face included: the result was a by no means taking animal. The immense production of fine wools in our colonies has caused the French stockmasters to pay more attention to the production of mutton. The prize Merinos at the Exhibition were well-fleshed, shapely animals, and seem to be well adapted to meet the requirements of their owners; they now very much resemble Southdowns. In some districts in the South of France the great source of profit from sheep is the milk of the ewes, which is made into cheese; this industry is said to be increasing. At Roquefort there is a factory where the milk of 250,000 ewes is made into cheese, and the amount turned out reaches from 3,000 to 3,500 tons annually. Roquefort cheese is now not an uncommon delicacy at English restaurants. Each ewe is estimated to produce about 24lb. of cheese in the year, besides suckling her lamb for two months. The Merino breed does not suit this purpose, as they are said to be the worst milkers of any breed of sheep. At the Government School at Grignon flocks of pure Leicesters, Shropshires, and Southdowns are kept. At the annual sale of rams from these flocks in 1877, the Leicester rams made an average of £28 each. The Leicester and Merino cross averaged £31, the Shropshire Downs £17 10s., and the Southdowns £13. These prices should prove a fair criterion of the opinions held by Frenchmen as to the merits of these respective English breeds for crossing their native races. I had a conversation on the

show ground with M. Raoul Duval, an eminent agriculturist, and member of the Chamber of Deputies. He was negotiating the purchase of a pen of Southdowns. He told me that several years ago he gave Leicesters a fair trial, but he found his clay soils were too poor for them; they did not do well with him. There were 325 pens of sheep in the catalogue, and few of them were wanting in the yard. Our British breeds of sheep were well represented, and appeared to great advantage when compared with the continental breeds. Most of our stockmasters whose names are famous in English showyards had one or more pens present, with the exception of Border Leicesters, of which there were none. The British exhibits of sheep, I think, appeared to much greater advantage than the cattle did amongst the foreigners. There was a curious rule which might, perhaps, be followed occasionally with advantage at some of our shows; it required all sheep competing to have been shorn bare within eight days previous to entering the showyard. I found Mr. Robson's Cheviots, from Reedwate, which had been duly clipped after the manner of Cheviot exhibitors, standing disqualified, with no prize, though they were the only representatives of the breed forthcoming. I advised the shepherd in charge to clip at least one pen in each class, and so secure the first prizes. He had telegraphed home for instructions, and I was pleased to find, on paying his pen a visit the following day, that though his jacks had been shorn of their imposing shapes somewhat, they had each received in recompense a prize of 400 francs. Mr. J. K. Fowler, of Aylesbury, who read a paper on the Exhibition at the London Farmers' Club this month, called my attention to some four-horned rams, which were a cross between the Dorset ewes and a four-horned race indigenous in the Andes in South America. These specimens, Mr. Fowler said, proved his theory that in crossing, the male stamped his own outward characteristics on the progeny, and I was agreeably surprised to be told by Mr. Fowler that he had been chiefly induced to commence his now famous experiments in breeding by the perusal of a paper many years ago which had emanated from the Newcastle Farmers' Club.

There were 386 entries of pigs. I did not observe anything about them worthy of special comment, except that it was generally observed that the French breeders of pigs would do well to lay hold of all the English exhibits for the improvement of their native breeds.

There were no fewer than 2,274 pens of entries for poultry, inclusive of pigeons. Poultry keeping is one of the chief sources of income of many of the small occupiers in certain districts of France, especially in Normandy. The import of eggs into this country from France is said to exceed 2,000,000 for every day in the year, and that we pay annually to France for eggs and poultry, considerably over £2,000,000 sterling. This is the more astonishing, seeing that eggs and poultry are so much more largely common objects of daily consumption in France than in England. But, notwithstanding this fact, Mr. Fowler, who is perhaps the greatest English authority on poultry, stated that the French breeds as a whole were very much inferior to our English breeds in every respect. I may here just venture to give it as my experience that whatever may be lacking in the French fowls when in the show pens, they are exceedingly pleasant subjects on a French table. A novel feature in the showyard was about 400 pens of rabbits, comprising every conceivable colour, form, and length of ear.

Any agricultural show without either horses or implements would be to some of my friends present here simply no show at all, or at least lacking the main elements of a successful show. The French are, however, great in order, so they consigned all the implements to their respective sections in the Exhibition buildings in the Champ de Mars. A special horse show was held later on in the season. In regard to the horses in Paris: The horses in the buses and trams did their work well; so much can scarcely be said for the cabby—they were wretchedly slow. The cart-horses have, generally speaking, a listless sluggish gait; it is not uncommon to see six white entire horses shambling along, all attached to a load that two horses in any of our towns would be expected to step briskly away with. There were, however, some magnificent carriage horses, which dashed along in striking contrast to the common Jehus of the streets.

## "OLD-FASHIONED WINTERS."

The bitter winter weather which, in defiance of meteorological folklore, has provided skaters with bearing ice both before and after Christmas, seems to show that we have got into a cycle of hard winters. The year has begun with storms and floods, and so far promises to be like its immediate predecessors. But the deluges of the last few years have been accompanied with mild winters. Last year there was a general complaint of the extreme mildness of the winter. People said to each other that the seasons seemed to have changed, and summer and winter to have got mixed together to the injury of both. Hence perhaps the impression that a severe winter may indicate that the seasons have sorted themselves, and will appear in succession more like their natural selves. This complaint of the change of climate is a very old one in England. A statement was published in the "Annual Register" of 1793 which probably reproduced the remark of a century earlier, as it anticipated those of nearly a century later. "The climate of England," said the chronicler of our grandfathers' days, "has of late years, in the opinion of many, undergone considerable change. Formerly we used to have smart frosts in winter, and hot, and sometimes dry summers; now, for some years back, both winters and summers have been wet." The chronicler of 1793 had not to look farther back for severe winters than we in 1879. The winter of 1776 was one of the coldest on record. The Thames was frozen over; the snow lay twenty-six days on the houses and in the streets, and so constant was the frost that the snow in the roads was not melted by sun or traffic. The oldest housekeepers living, said Gilbert White, do not remember so long a frost. There was a shorter snap of great cold in 1784; but taking the twenty-five years over which the writer in the "Annual Register" of 1793 may have looked back, we find from Gilbert White that only eight of them had frosty Christmases; while fourteen ended with mild weather, and three with alternate frost and thaw. The proportions were nearly reversed in the first two weeks of January, which were mild in eight of the twenty-five years, and frosty in thirteen. Very similar results appear on looking back over the last half-century. A few severe winters like the bitter Christmas of 1860 and the six week's frost in 1855, stand out in everybody's recollection; but out of the fifty Christmases twenty-seven have been mild, and it is an odd coincidence that precisely the same number of old Christmases, as we may call the first fortnight in January, have been frosty. In only sixteen of the fifty years the last fortnight in December has been severe; in only fifteen of them has the first fortnight of January been mild.

It is obvious therefore that the traditional impression that wintry weather before Christmas indicates mild weather after Christmas, though the experience of this winter proves it not to be always true, has some basis. It may possibly be true in ordinary years, but in exceptionally mild winters or exceptionally cold ones it does not hold good. It is, moreover, quite clear whence came the traditional Christmas, the old-fashioned Christmas. It is truly a tradition, and comes down from the times, previous to the change of style in 1752, when the Christmas Day fell where Twelfth Day now stands. When our great great grandfathers dropped eleven days out of their lives they dropped with them the old-fashioned Christmas. The coldest time of year came as of old from two to three weeks after the shortest day; but Christmas, which had been a fortnight forward in the lengthening day and the strengthening cold, as the old adage reminds us, was brought back to within three days of the solstice, and hence into a milder season. Gilbert White's observations in the last century and the more scientific records now kept agree in showing that there are more than three frosty Januaries, two frosty Decembers, and consequently three frosty Christmases in the olden time to two such Christmases now. But at no period was Christmas always frosty. Indeed, there is no reason to believe in any real change of our English weather. The grumbler of 1793 only thought what every generation has probably thought when it was going through the ever recurring cycle of wet and mild winters and wet and cold summers. We constantly go through the same experience, tell one another that winters and summers were not what they used to be, till such a season as the present comes to remind us that things have not greatly changed; and then we congratulate

ourselves or lament, as our feelings may be, that we have at last an "old-fashioned winter." The old-fashioned winter is in fact one which is so exceptionally severe that it is impressed on individual memory, or on the general recollection, and which recurs so rarely that each one gets almost a legendary character before a similar experience comes round again.

It is satisfactory in such a season as this to know that January is the coldest month in the year, and that its first fortnight is its coldest half. An exceptional winter, however, may last till March; and the winter of 1855, which set in late in January, and one of the cold winters which succeeded it did so last. It may be noted, too, that cold winters seem, like the group of stormy years we have lately been passing through, to come together. It is quite certain that from the time when Pharaoh's seven fat years were succeeded by seven lean years, it has always been believed that good and bad harvests come in groups. The three harvests preceding the last were bad; the years were wet with mild winters, like those just before 1793; last year brought an improvement, and now that we have a severe winter it is not unreasonable to hope that it may indicate, as the country folk generally believe it does, a still further change for the better in an agricultural sense.—*Daily News*.

Mr. Edmund Beckett writes to the *Times*:—If the writers on our temperature will examine the Greenwich tables of it for the last 108 years, they will find some results rather different from what they are imagining from insulated facts. An anonymous writer in the *English Mechanic* of February, 1876, gave no doubt correctly, the average monthly temperatures from those tables for four periods—from 1771 to 1799, then to 1829; then to 1859, and then to 1874, and from them he deduced a slight increase of winter heat; but he did not take three proper months together for some reason. I found, when the three proper months of each season were taken together, the following much more striking results:—The mean winter heat for the first of the above periods was 36.7 deg.; for the second, 37.9 deg.; for the third, 39.6 deg., or an increase of practically 3 degrees in the 75 years. The spring temperature had also steadily increased 1.6 deg.; the autumn, 1.3 deg.; and the summer, 0.7 deg.

I may also remark that from the London tables of rainfall for nearly all this century, compiled by the late Mr. George Dynes, of Cubitt and Co., it appears that there was a steady decrease of rain of one inch in 60 years until 12 or 14 years ago (for the result is the same whether you take 10 or 14 year periods), but that in the last of such periods it has increased. I have not the means at hand of carrying on the examination for the last few years, but from recollection of the seasons there can be no doubt that both these conclusions would be strengthened.

**INTERNATIONAL EXHIBITION OF MILLING INDUSTRIES.**—The Association of German Millers, which has for its object the advancements of mill industries and the branches of trade connected therewith, has resolved to hold an international exhibition in June and July next, in the large buildings of the Tivoli Brewery Company, on the Kreuzberg, at Berlin. The exhibition is intended to comprise:—1. All engines and machines employed for driving mills. 2. All objects necessary for the internal fittings of mills. 3. All allied branches of industry, such as pulping, oil, sand, fulling, colour, rice, bone, and bark mills, &c. 4. All apparatus and machinery connected with dough making and baking. 5. Lighting apparatus, telltale clocks, fireguard apparatus, fire-engines, packing appliances, scales, weigh-bridges, waggon, &c. 6. All products and results of milling, baking, &c. 7. All sorts of grain coming under the millers' hands. 8. Whether the machinery will be set in motion during the continuance of the exhibition depends upon the amount of support the venture may receive. All applications for further information, and notice of intention to exhibit, must be addressed to "The International Exhibition of the German Millers' Association," care of Joseph J. Van den Wyngaert, 95 Potsdamer-strasse, Berlin.

## THE CLYDESDALE HORSE.

We give below an abridgement of the excellent history of the Clydesdale Horse, contained in the preface to the recently-issued volume of the Clydesdale Stud Book.

In attempting to settle the hitherto vexed question of the origin of the Clydesdale breed of horses, we have had to consider two frequently-advanced theories:—the first, that the breed is the result of a cross between the native Scotch mares and some Flemish stallions imported into this country by one of the Dukes of Hamilton more than two centuries ago; the second, that it is a "mixed" or made breed, the reward of careful attention in the selecting and mating the best animals by the farmers in the Valley of the Clyde. The first theory is the more popular one; but unfortunately there are no records existing as to the introduction of the Flemish horses mentioned; and, as it is found on inquiry to be totally unsupported by local tradition it is not so readily acceptable.

One of our most noted authorities on the agriculture of the West of Scotland, Aiton of Strathaven, writing in the year 1810:—"One of the ancestors of the present Duke of Hamilton is said to have imported from Flanders, about the middle of the 17th century, six fine black stallions which he kept at Strathaven Castle for the use of his tenants and vassals. These are said to have greatly improved the breed of horses in the county of Lanark." In a footnote to the foregoing Mr. Aiton adds:—"I have lived many years at Strathaven, where these horses are said to have been kept, and made all possible inquiry into the fact, but no person in that part ever heard of such stallions till they read concerning them in some of the statistical accounts of other parishes or similar publications. I am confident that such large horses as they are represented to have been would not, when coupled with the diminutive mares then in that quarter, have raised an improved, but rather an unshapely and unhealthy breed. It must have been better feeding and treatment that improved the breed anywhere." Aiton's "Report on Ayrshire," 1810.)

After quoting from the Rev. David Ure the history proceeds: Taken in conjunction with the evidence of Aiton, the above testimony goes far to prove that the Clydesdale breed of horses, if not originated, was at least brought to a high state of perfection in the Upper Ward of Lanarkshire. This, too, is in accordance with the traditions of several of the oldest farmers of the West of Scotland, many of whom there are still living who recollect their visits to Lanark in August for the purpose of purchasing Clydesdale colts.

How or when the Upper Ward of Lanarkshire became noted for its breed of draught horses statistical history gives us no reliable information. Ure's report, even if taken against the valuable testimony of Aiton, seems to infer that the farmers in that part of the county were more careful in preserving the strain of Flemish blood introduced by the "six black stallions." The traditions of the Upper Ward do not, however, bear out this in any way, though, curiously enough, one which is so well supported as to be thoroughly reliable ascribes the origin to the introduction of a Flemish horse. It is to the following effect:—

Some time between 1715 and 1720, John Paterson, of Lochlyoch, on the estate and in the parish of Carmichael, grandson of one John Paterson, who died at Lochlyoch in 1682, went to England and brought from thence a Flemish stallion, which is said to have so greatly improved the breed in the Upper Ward as to have made them noted all over Scotland. The Lochlyoch mares were famous in the Upper Ward during the latter half of the last and the first two decades of the present century; and a Mrs. Paterson, of Lochlyoch, mother of the present tenant of Drumalbin, now 97 years of age, still has recollection of a noted black mare from which many of the best stock in the Upper Ward are descended.

What were the distinguishing features of the native breed previous to the introduction of the Flemish horse, about 1715 cannot now be definitely determined; but there can be little doubt that they were mostly of English origin, and of a mixed, character.

The Lochlyoch mares were generally browns and blacks, with white faces and a little white on their legs; they had grey hairs in their tails, occasional grey hairs over their bodies, and invariably a white spot on their belly, this latter

being recognised as a mark of distinct purity of blood. The mares died out at Lochlyoch about thirty years ago.

The Lochlyoch stock having been long noted in the Upper Ward and largely drawn upon by breeders, there is no doubt that to them, or, more correctly, to the black horse of 1715, the Clydesdale horse owes its present distinctive character.

Another horse which is said to have greatly improved the breed in the Upper Ward was one "Blaze," so called from a white mark on his face. He was purchased by a Mr. Scott, of Brownhill, Carstairs, as a two-year old colt, in Ayrshire, about the year 1780. He was taken to Edinburgh when four years old to a Show held in the Grass Market there, and was successful in gaining First Prize.

More modern than the Lochlyoch and Brownhill Clydesdales (the former as the most noted breed in the Upper Ward of Lanarkshire during the past century, and, considering the strong tradition as to its origin, the fountain-head of the present famous Clydesdale breed) were those of Lampit, in the parish of Carnwath. This breed, which was the most noted at the commencement of the present century, circumstances go far to prove was an offshoot of the Lochlyoch stock. At any rate, at the dispenishing sale of the stock of Mr. Thomas Clarkson, of Shotts Hill Mill, parish of Carstairs, Lanarkshire, in the year 1808, Mr. Somerville, of Lampits Farm, purchased a two years old filly with which he founded his stud. This filly was the mother of "Glaner" (335), "Thompson's Black Horse," from which all the best and most noted horses of the present day are descended. Mr. Clarkson, who bred the filly, had acquired considerable reputation in the Upper Ward as a breeder; and being a nephew of the then tenant of Lochlyoch (who, indeed, was trustee on the estate at the time of sale), there is every reason to believe that the Shotts Hill stock was related to that of Lochlyoch, bred off the Flemish stallion brought from England.

About ten or twelve years after its commencement, the Highland Society (now the Highland and Agricultural) which had been formed in the year 1784 for the purpose of improving the agricultural condition of the Highlands, began to take an interest in the improvement of the breed of horses, and premiums were offered in the different districts within the sphere of the Society's operations for stallions, mares, colts, and fillies.

In 1827 a new epoch in the history of Clydesdale breeding was inaugurated by the Highland Society holding its first open show at Glasgow for horses, when a prize of ten sovereigns was awarded to a mare aged six years belonging to Mr. John Cairns, Nether House. This mare's sire was a horse named the "Brown Glancer," belonging to Mr. Thompson of Germiston, and so called to distinguish him from his more noted compeer "the Black Horse." At this Show, Mr. James Frame, of Broomfield, made his first mark in the Society's annals by securing Second Prize for the dam of "Glaner II." (337), and First Prize for the best three-year old filly. The Premium for the best colt was on that occasion won by "Sovereign" (811), the property of Mr. John Brown, Kirkmuir, and got by "Farmer's Fancy," a noted son of Thompson's black horse, "Glaner." These are few horses in the present volume which can be traced back directly to "Sovereign," though he bred well; and Mr. Peter Crawford, the veteran tenant of Dumgoiack, received from the late Lord Belhaven, acting on behalf of His Majesty King George the Fourth, £180 for a colt by him, which was subsequently presented by His Majesty to the Grand Turk. Though interesting, the Show was not considered by judges to have been a very satisfactory one, as they withheld the Second Prize for colts owing to want of merit.

About the commencement of the present century Mr. Frame occupied the farm of Broomfield, which is situated on the banks of the Clyde near the town of Hamilton. A man of more than average intelligence, he farmed his land to an extent which was then considered very liberal, and so acquired some note as an agriculturist. A capital judge of horses, it was natural that his enthusiasm should take a strong bent in that direction; and consequently it is as the breeder of Clydesdales that he is best known. The same broad spirit characterized his breeding as his other farming operations; and so, when the Highland Society made a rule that all horses entered for competition should be either "black bays or brown bays," he set himself to the fulfilment of the new conditions by castrating all colts which happened to be of other colours. Being the leading stallion-owner of the day,

he may be said to have created the fashion which now exists for bays and browns, while at the same time checking the reproduction of greys, which were then very common.

Scarcely less enthusiastic was the late William Fulton, who occupied the farm of Spruiston, near the borders of Renfrewshire and Ayrshire, and who died about the year 1850.

In recent years the Clydesdales of Kirkcudbright and Wigtown have attained an enviable reputation, and a retrospective glance at their history cannot fail to be interesting. Many have been of opinion that the Galloway breed of Clydesdales formed a distinct branch from that of Lanarkshire; but this is a mistake, and can only have arisen in the minds of those ignorant of their history, as they are all connected with the Clydesdales of the Upper Ward. About the commencement of this century Galloway farmers purchased largely at Lanark fair; and their soil being equally favourable, is not superior for breeding purposes, to the rich haughs on the Clydeside, several of them acquired a reputation for the strength and quality of their stock.

About 45 years ago the late Sir James Dalrymple Hay, of Dunsragit, who farmed extensively, had a superior breed of grey mares, which, it was generally understood, were bred off a strain of Lanarkshire blood. Mr. White of Balyett, Mr. Anderson of Drumore, and Mr. Agnew of Balsallock, had horses of the same strain, and the dam of "Thane of Glamis" (855) and some of the Milmain mares are descended from this stock.

It was not, however, till the late Mr. Robert Anderson, of Drumore, Wigtownshire, commenced breeding that the Galloways acquired that reputation for Clydesdales which at this moment is so very high.

Not less noted than the Clydesdales of Galloway and the western counties are those of the peninsula of Kintyre—the richest and best cultivated portion of the extensive county of Argyll. The Kintyre land is well adapted for the rearing of Clydesdales; the pasture is rich, and the soil favourable for the growth of bone and the development of hoof; while the climate is healthy though more moist than that on the east side of the Firth. Notwithstanding that it is swept from side to side by the fierce Atlantic gales, the young Clydesdale stock on Kintyre thrives well, and, what is of more importance to buyers, improve on being "transplanted."

Like the Galloway and other noted strains of Clydesdale blood, that of Kintyre has a history, which, like the others, has its origin in the Upper Ward of Lanarkshire. Up to a comparatively recent date the estates of Lee and Largie, in the Upper Ward of Lanarkshire and Kintyre respectively, were in the possession of the same proprietor, the late Sir Charles Lockhart, who took an active interest in the promotion of agriculture, and particularly the improvement of horses.

Another line of stock originating from a different strain to the black horse, though also finding its source in the Upper Ward of Lanarkshire, is that to be found in the family table. (Stud Book).

"Old Sticher," which heads the tree, was bred by the late Major Millar, of Dalawinton, Dumfries, and was said by some to have been out of an English agricultural mare. The late Mr. Muir, of Sornfallow, Lanarkshire, purchased him and sold him afterwards to Mr. Ellis, factor to Sir James Graham of Netherby, on whose estates for a number of years he successfully served mares, his stock turning out very well. He was a bright bay with a small white stripe on his face and a white hind foot. Those who recollect him say he was perfect in all his shapes, moved well, and was possessed of a nice mild temper.

Of a totally different strain of blood to that of the Broomfield horses were the "Comets" of Mr. Wilson of Durn, Banffshire, now residing at Leithenhall, Wamphrey, whose enthusiasm in breeding greatly tended towards improving the draught-horses of the north. On a reference to the genealogical table, the descent of this stock will be seen to have been from a horse named "Briton," when the property of the late Mr. Fulton of Spruiston, but which has been identified as the same animal with "Northumberland" (871), well known on the Tweedside border, where he travelled many years as "Calley's Brown Horse."

An exceedingly fashionable strain of blood at the present date is that of which the oldest noted horse was "Old Clyde" (874), sometimes known as "Clyde Boy" bred by Mr. George Scott, Barr, Largs, Ayrshire, about the pedigree of which

there is some little dispute. His breeder says his dam was served by two horses—one named "Scotsman" (753), a little brown horse bred in the Lanark district, the other an unnamed, two-year old volt. Breeders generally have agreed that "Scotsman," which, as the property of Mr. Thomas Young, Stewarton, travelled in the Cunningham district of Ayrshire, was the sire.

## THE WHEAT CROP OF 1878.

Mr. Thomas C. Scott writes to the *Times*:—"The numerous returns, 394 in number, collected by the *Mark Lane Express* of the actual and estimated yield of last year's Wheat crop and published in its columns on the 6th inst., appear to me to afford the best data that have yet been obtained for forming an approximate estimate of the aggregate produce of the country. Seventy-nine of these returns report a crop over an average and 123 under; this gives a balance of 43 under an average, and, taken in relation to the 394 returns obtained, is equal to 18 per cent., or 3 3-10 bushels under an average crop of 30 bushels, leaving a product of 26 7-10 bushels per acre.

The area returned as under Wheat in the United Kingdom in 1878 was 3,382,000, and the aggregate product at, say 27 bushels an acre, would thus amount to 11,413,250 quarters, or, in round numbers, 11½ million quarters. Deducting 1,000,000 quarters for seed, this leaves 10½ million quarters for consumption. Taking it at the old standard rate of 5½ bushels per head per annum for a population of 31,000,000 gives 23½ million quarters.

Labour, both in town and country, is at present extensively unemployed and indifferently remunerated; but this circumstance will not diminish the consumption of the cheapest of all food, wheaten bread, although it may lessen that of dear animal food. Our foreign requirements for the cereal year 1878-9, will, therefore, be 18 million quarters, nearly equal to the largest importation we have ever had. This immense foreign requirement would in bygone years have enhanced the price of home grown Wheat, but now it has no such effect; for the average price of wheat at the present time is lower than it has been during this century—namely, 89s. a quarter. Taking it 40s. a quarter, the English product will only realize £21,000,000—equal to £8 5s. per acre on the area under this crop. Deducting the cost of production and marketing, very little, if anything, will remain for the cultivator's remuneration. This, though a bad look out for them, is undoubtedly a boon to the consuming million. Taking our foreign requirements at the same rate, the cost will be £26,000,000, and last year the same quantity would have cost £24,500,000. The aggregate saving, then, to the consuming public in the cost of wheat, will this year be £15,275,000 over that of last, partly at the expense of the home grower and partly at that of the foreigner. The small residue, if any, which will be left to the latter appears a very inadequate inducement to continue the cultivation of wheat, and it is only the anticipation of better prices than can induce the area to be extended.

I may add that, from my observations before and information since harvest, 4 concur in the result the above figures have worked out.

Mr. Arthur H. Savory, of Addington Manor, Evesham writes: In Mr. Scott's letter on this subject in the *Times* of January 14, he says:—"Taking the price of wheat at 40s. a quarter, the English product will only realize £21,000,000, equal to £8 5s. per acre on the area under this crop. Deducting the cost of production and marketing, very little, if anything, will remain for the cultivator's remuneration." The following figures will, I think, prove that, so far from anything remaining for the cultivator's profit, the balance is grievously on the wrong side. Cost of an acre of wheat in 1878:—Ten loads of manure, at 7s. 6d. per load carted on to the land, £3 15s.; spreading ditto, 2s.; ploughing, four horses at 3s. 6d. per diem, 14s.; 2½ bushels of seed at 6s., 15s. 6d.; drilling, 2s., and two harrowings at 2s. 6d., 5s.; rolling, 1s.; hoeing and weeding, 4s.; cutting, tying, and stacking, 12s.; carting and stacking, 6s. 6d.; thatching (including straw), 1s. 6d.; thrashing, 10s. 6d.; winnowing, 1s.; cartage to market, 1s. 6d.; proportion of sundry expenses, 3s.; rent, rates, tithes, and taxes, £2 5s.; interest on capital, £13 per acre, at 5 per cent., 12s.—total, £10 7s. 6d.; deduct manurial value of straw, 1½ ton, at 12s. 6d., 15s. 6d.; produce in quarters (four), £9 12s.; net cost per quarter, £2 8s.

I believe these figures cannot be found fault with as one-sided, and I believe that on the average, from fair, ordinary wheat-land, at a rental, including rates, tithes, and taxes of 45s. per acre, the average yield would be not more than four quarters.

Should the price of wheat remain at the average of the last three months until the remainder of the season's crop is sold out, adopting Mr. Scott's estimate of 11½ million quarters as the home growth of last year, the loss entailed upon the British grower will be not less than £4,600,000; and should 40s. per quarter appear likely to be a ruling price in future years we cannot fail at once to witness a gigantic fall in the rents of the arable land of this country, affecting the whole of the land under a rotation in which wheat occurs, or a total of some 14 million acres.

The question that should now most seriously agitate the minds of the landowners and occupiers of this country must be, Does the present price of wheat leave a profit to the American grower, and will he continue to produce it at that price? Upon this point it is most important that we should have some reliable information, which comes of your readers are, doubtless, able to supply.

## FARM TENANTS AND COVENANTS.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—Before proceeding to the main object of this letter, let me advert to two particulars.

Your correspondent, Mr. T. Robertson, has to go all the way to King John to bring back a very far-fetched argument. I am not disposed to be quite so archaeological. What John usurped was the common and the heath. What the squire lets is the enclosed, drained, hedged, ditched, maundered, and weeded field. What is it to the tenant whether he pays the same rent to one man a squire, or another an out-going tenant? My position is that rent, to whomsoever paid, is merely the interest, and a very poor one, on the capital sum in labour or wages spent to bring the land to the condition in which the tenant enters on it. Would it be any less or more than rent, whether paid to one man or to another? Your own columns (*par parenthese*) exhibit an apt illustration of my position. Farmers in Canada and the United States find it better and cheaper to pay rent for cleared land than to buy a Quarter Section next door, unreclaimed, at 4s. an acre in fee simple. Emigrants who are offered a lot as a gift, on condition of settling on it, cannot muster the £40 necessary to put up their shanty, having no landlord to do it for them. As to the Sutherland clearances—that pet grievance of Celtic gaseous patriots—they are wholly irrelevant to the subject, and it is only a pity there are not more of them. The holdings only bribed a lot of idle caterans to vegetate in rags on the borders of perpetual starvation. Their removal at the Earl of Sutherland's sole cost to comfortable cottages on a sea-coast teeming with fish, and a fertile soil, where they have all thriven and become civilised, was being "cruel to be kind." The same clearances now support many more persons in decent comfort than left them in hungry barbarism. If Gaelic could be forgotten, and all Celts enabled to speak English, it would greatly improve their prospects in life.

Cockney economists, who know little of rural affairs, are pleased to say that land is held or purchased, not with a view to profit, but to increase the consequence of its owners. Is it necessary to notice such trash? Can squires or lords live on nothing? If not rent, then what else is to maintain them? Amateur landlords—is not the idea as ridiculous as the "neighing of all Tatter-sall's?" Consequence with no income! Where would that be in Mammon-worshipping England?

In entering on the examination of the question of lease-covenants, let me whisper a word in the ear of the farmers. I have read and heard of expressions let loose in

print and speech by decent and law-abiding Triptolemus not easily distinguishable from the wild anarchy of the *sans culottier* of the French Revolution. Let them keep in mind that Joseph Arch is behind them with his nationalising of the land, compulsory fixity of tenure, abolition of tithes, forcible subdivisions of the soil, and other "Russell Purges." Caliban moes and chatters out of his Union Club—

"The island's mine by Sycorax my mother,  
Which thou tak'st from me."

Let "Farmer Flamborough" beware lest he raise a devil he cannot lay. Jack Cade will not stop at the squire, should his tenant help him so far on the way to confiscation. I am a Radical of the old *Westminster Review* school, but I do not hesitate to maintain that Mr. Gladstone's Irish Land measures amounted to virtual revolution—most certainly to practical spoliation. Have they satisfied those to whose clamours the sacrifice was made? They have only whetted the appetite for breaking down the distinctions betwixt *monum et tum*, and there are ominous mutterings of a movement to import the Land Laws of Ireland to this the neighbouring island. Household suffrage has already enabled Home Rule to rear its hideous front in our towns. Extended to the counties, Arch's mob, conspiring with the Fenian contingent to be found in every English centre, could outvote landlord, tenant, and all their following, at least three-fold.

Has it ever occurred to reflecting statesmanship that an order of landed nobility and squirearchy remains in this country *alone*? What is there between the Sultan and the people in Turkey—what between the Rajah and the mass in India—what between the mandarins, the mere creatures of the Emperor, and the 450 millions of China? In Spain, Portugal, Italy, an aristocracy has practically disappeared. In France the Noblesse had as a political quotient virtually been suppressed by the Court, the chief ambition of the greatest peer being to air the king's shirt at the morning's levee, or to prostrate himself before his reigning concubine. Here the order of landowners is a power in the State, dividing authority and government with the Crown, standing between the Sovereign and the people, giving stability to society, and by its independence equally upon Court and subjects, rebuking official corruption and curbing democracy. It is by the elimination of that order from Continental and Eastern States that misrule has brought them to effectlessness or revolution. Even in the United States, where a landed order never prevailed, the cry of Nullification was raised many times, a deadly civil war ruined the South, sacrificed two millions of lives and a thousand millions of money. At the late Presidential Election the republic again rubbed shoulders with revolution, and the ominous cry of communism grows daily more general. A hereditary or primogenital landed order has, therefore, something to say for itself. The Italian republics demonstrated that a mere merchant oligarchy is about the vilest constitutional system that statecraft could devise.

Game laws mean the preservation of vermin that consume crops. Look at any newspaper; many columns of every one are taken up with field-sports. Our people are essentially gymnastic, fond of physical adventure, instinctive athletes. Hunting, deer-stalking, shooting, do away with these, and the training as well as the tastes that impart intrepidity to our soldiers and sailors, might they not be lost to the service of the State? Our poachers are our best riflemen. Of course the abolition of game laws implies the entire disappearance of game, and those inducements to physical adventure, without which our fighting power may cease to be

The cheap defence of nations.

I make these suggestions merely to mark that game laws are not without their *rationale*. Nevertheless I am

satisfied that every tenant should have full power over the vermin of the land he tills. Indeed, as game from one farm may feed on the crops of another, I am afraid I must admit the time has arrived when game-preserving must come to an end.

No man who understands anything of farming can surely doubt that some restrictions ought to be imposed on the tenant's mode of culture. If, as your own columns attest, proper tillage requires an outlay of, say £10 per acre, it is very clear that, to let land without the obligation of conditions is just to charter the tenant to take £1,000 out of a hundred acre farm. Is it in the interest of anybody that the soil should be allowed to become foul—that the component elements of cereals should be exhausted by over-cropping—that pasture should be entirely stripped of milk-producing qualities, as occurred in Cheshire, by continual grazing by milch cows without restoring caseine by bone-dust and other manures? As I have explained rent is really interest on the capital spent in raising land to the state of a profitable instrument of reproduction. Surely it cannot be reasonable to give a tenant leave to destroy the letting value of his holding! Ought not the covenants of leases to be left to the voluntary agreement of lessor and lessee? Is not the interposition of the law virtual confiscation? Has not that been the practical result in Ireland? In valuations and compensations landlords, often poorer than their tenants, always are made to experience the effect of Pistel's sentiment—

Base is the slave that pays.

The landlord is sure to be made the Dives of the parable, and the tenant the Lazarus—while referees are eye ready to be generous out of other people's pockets. It is notorious that in Ireland compensation has been frequently awarded to an amount greater than the fee simple of the land. Import the Paddy system here, and in the owner's self-defence, tenancy will cease. The laws of distress and of hypothec are denounced. Let these be abolished, and small holdings, as also tenants of moderate means must altogether disappear. The owner would see the crops and stock raised on his own land sold under his nose to pay strange creditors, who never should have given credit, while he goes cheated out of his rent. The grocer may seize the dung heap, and the butcher the straw, under a prior judgment—nay, a collusive bill of sale may be granted by the tenant on entering on the lease, so as to defy the squire, and everybody else. Would such a state of the law benefit agriculture? If distress is to cease, how about tithe and Land Tax? The owner would, perhaps, protect himself by requiring security, or stipulating that rent should be paid in advance—or, easier still, take the tenant's promissory note payable at sight, so as to enable him at once to recover judgment. But such a state of matters would drive all farmers of limited means or responsibility out of the field—it would throw owners into the hands, and place them at the mercy, of men of capital, who would get the land at their own price—and at last land letting would cease altogether, the owners becoming the cultivators as under Stein's and Hardenberg's policy, in Germany; or, perhaps, the metayer system of Italy would be introduced. Unless the Legislature deliberately entered upon a policy of virtual confiscation, fatal to the very palladium of civil society, the inviolability of private property, I cannot see how the abolition of distress for rent would work. Landlords would insist on such arrangements as would be more injurious to the tenant than the present law—which it must not be forgotten is often a protection to the tenant against execution by other creditors.

I cannot for my own part see how either landlord or tenant should rest satisfied with anything less than a

19 or 20 years' lease. For myself I could not expect any man to lay money, skill, and work out on my property without complete security for a reasonable return, and as a tenant I could have no heart to go on with the cultivation of a farm of which my tenure was precarious and uncertain.

I am, indeed, inclined to go much farther than that. Show me how *absolute* fixity of tenure—a lease in perpetuity, at an adequate rent—can be effected, consistently with complete security to the ground landlord that the soil will always be so cultivated that its value will never fall below what will sustain the covenanted ground-rent, and I have no hesitation in declaring my conviction that that is the wisest arrangement for both parties, and the best way of promoting the progress of agriculture. A nomadic tenantry, a fluctuating farmer class, if not a positive evil, is yet confessedly infinitely less to be preferred than any order of cultivators having a *quasi* or qualified ownership in the land they till, and bound to the same farm for generations by a tenure almost as permanent as that of the landlord himself. The 99 years lease might be sold at a premium to cover the contingency of dilapidations, or sufficient buildings, drains, roads, and other "improvements" might be executed by the lessee to compensate for any probable deterioration from inferior culture. Society has outgrown or thought the feudal spirit. Land is fast becoming a mere commercial commodity, and the only relation between owner and tenant is that of buyer and seller, or locator and locatee. When that household suffrage extends to the counties which will make the Archies and Simmonses supreme, and leave squire and farmer nowhere, these latter classes, like their congeners in "the model republic" will, I greatly fear, cease to struggle for a position they will be no longer able to keep, and will retire from politics, and, too probably, from the magistracy. The accepted logic of representative liberators is that Hodge at Braintree must have a vote, because Darby in Colchester has one. That proposition, if it be enforced, cannot stop at Great Britain. It will return 103 Fenians for Ireland, and the Home Rule party in every British town and village will combine with the Democracy to enforce their agrarian views. What is there to effectually resist them? The Emperor of the French *would* have universal suffrage; where is he or his empire? The King of Spain is at the top of a *plebiscite*; it has attempted his life, and a revolution. The King of Italy is all for an extended suffrage, and has just escaped assassination, besides having to change his ministers once a year. The Emperor of Germany has proclaimed universal suffrage—he has been shot—and the party of Communistic revolution has almost over-mastered his government in Parliament, while Bismarck has betaken himself to such measures of repression as are very likely to end in what the Duke of Wellington called "a revolution in due course of law." Even in Russia, nihilism threatens the emancipating Czar. Fortune they say makes us acquainted with strange bed-fellows. Who would have thought that the late Earl of Derby would have one fine morning "taken" a leap in the dark, with the British Constitution in his breeches pocket; and that the leader of the Conservative party, and Prime Minister of the Tory Government, would make it the boast of his statesmanship that he has "dished the Whigs," and made Demos supreme. The Agricultural Unionists leave nobody any room to doubt what they would be at. If they attain to prevailing legislative power they are deliberately pledged to turn society upside down, whenever that political millennium shall have arrived when "Jack shall be as good as his master." As there are at least ten Jacks to every one master, let squire and farmer very clearly understand that when the period shall have arrived for the great State quack to administer his coun-

stitutional bolus to the counties, they themselves will be of no more account than

"A prologue to an egg and butter."

I am, Sir, &c.,

SIDNEY SMITH.

*The Manor, Feltham, Jan. 14.*

### FAT CATTLE SHOWS.

The question as to the ages when animals should be ineligible to compete for prizes at fat cattle shows has been ventilated at a quarterly meeting of the Galashiels Farmers' Club. It was introduced by Mr. Thomas Swan, live stock salesman, of Edinburgh, who read a paper offering suggestions for increasing the utility of such shows. He contended that the lessons to be derived from the great exhibitions of breeding stock, which bring together the best specimens of every pure breed, and which have for their ultimate aim the protection of meat, would be incomplete if they were not supplemented by exhibitions of fat stock. The former present to breeders the different varieties of stock adapted to their respective requirements, and the latter should afford to farmers generally instruction concerning the value of the respective breeds, and the results of crossing them for the butcher. He, therefore, assumed that one is essential to the other, not only in an educational sense, but also as a direct means of demonstrating to what a pitch of perfection animals may be brought, and what kinds of cattle and sheep are likely to be most profitable for feeding. The professed object of the managers of some of the principal fat stock shows was to encourage early maturity and profitable as distinguished from excessive feeding, which adequately indicated what should be the *rationale* of their operations. From the reports which had appeared, however, the Christmas fatstock shows recently held were remarkable for the number of animals present which had gained prizes in previous years. One, for instance, which was first at Birmingham was not only first at London in 1876, but won the champion prizes at Norwich and Hull in 1877; while another which won first honours here was first at Edinburgh in 1876, and second at London in 1877. Lord Lovat's celebrated cross-bred ox, the champion prize taker at Bingley Hall in 1878, was first at Edinburgh in 1876, second at Birmingham the same year, first, and winner of £40 as the best cross-bred beast, at London in 1877, champion at Newcastle and first at Edinburgh in 1878. Again, a Hereford, which was first in its class at Birmingham in 1878, was champion of the breed at London in the previous year. Thus winners of five first prizes in 1876 and 1877 were again successful in 1878, besides nearly monopolising the special prizes. In London, the champion at Birmingham and Oakham the previous year took a similar position in 1878; a Highland ox, which was first at Aberdeen and Birmingham in 1877 took a first prize; a polled bullock, which was first in its class at Edinburgh in 1877 took a second prize; and an animal which was first in the class for Scotch cows or heifers at Newcastle, in 1877, again obtained first honours; while, as if to show the risky nature of such continuous feeding, a first prize-winner among the younger cross-bred class, in 1877, was only commended; and a heifer, first at the meeting of the Highland Society in 1877, and first also at Birmingham the same year, received her draughts in a "commended" ticket. Here, likewise, was the £157 10s. heifer of the previous year. Denied the championship on that occasion, she without difficulty gained for her spirited purchasers the trophy at Aberdeen, to secure which the purchase was made. In the opinion of Mr. Swan she was one of the best types of her breed ever seen; and in the previous year was the reserve number for the blue ribbon of the Smithfield Show, where she took a £20 prize, but made less than half her cost price, including keep, when sold for consumption. He had partially analysed the accounts of two leading shows of fat stock—namely Birmingham and London—in order to prove that, in place of early maturity and profitable but not excessive feeding, the principal premiums were awarded to animals which are now as nearly as possible unsaleable. For several years (he added) there has been a gradual but sure falling-off in the demand for overfed animals which had culminated last year. From his own experience, and from letters before him from London, Liverpool, Hull, York, and Newcastle, it was evident that this kind of stock could not be turned into money, except at a price which was

scarcely equivalent to that obtainable for the second or third qualities of ordinary stock, owing to the waste in them, and the difficulty of getting consumers to take them. Mr. Swan admitted that the evil of which he explained would cure itself to a certain extent; but he urged that some restrictions should be placed upon age, or upon animals which had been exhibited in previous years. The knowledge that these would again be brought forward kept away persons who would otherwise exhibit. However interesting it might be to note the progress made during the interval, the actual achievement of winning a prize with a beast four-year-old, which had taken honours at the age of three-years, was not in his estimation, so great, after all. He thought that no prizes should be given at fat stock shows to cattle four years old, except in classes for cows or West Highlanders; the latter requiring greater age to come to maturity. A show animal was of most value per stone under three years old, and generally speaking, it was, even though heavier not worth much more money the succeeding year. Lord Lovat's champion, which might be regarded as one of the completest specimens of a cross-bred ox met with for many years, when sent to London in 1877, had gained 4cwt. live weight from its Edinburgh weight in 1876, and from 1877 to being exhibited last year had gained only 3 cwt.; or between 1876 and 1878 in weight of beef, allowing 70 lb. to the 112 gross, 490 lb., representing a money value for two years' keep of £15; while a moderate estimate for keeping such an animal for exhibition, not including expenses, would be, for the same period, £8 per month, or £72; so that, unless an animal is exceptionally successful in the prize list, he gets of less value the older he becomes. Unless in the hands of the breeder, who is entitled to the greater credit, he would prohibit all fat animals being exhibited more than one year, except as extra stock, the breeder who held his own, and showed it in the young class one year, being permitted to carry it on himself only till the succeeding year. In the brief discussion which ensued, the speakers concurred in thinking that the suggestions made in the paper were worthy the consideration of managers of fat stock shows.

—*Midland Counties Herald.*

MR. FORSTER ON "RECIPROCITY."—In reply to a question as to the policy of Protection or Free Trade, Mr. Forster said, at Bradford recently, "I am quite aware that there is very great interest in this question of Free Trade and Protection, or what a Tory peer called reciprocity, 'Protection under a fancy dress.' It would take me some time to go into the question. In the first place, I believe that reciprocity, as it is called, would not help our trade. I am a bad tradesman myself, and I do not object to state that I should be very glad to have my own trade helped; but by adopting reciprocity I do not think that we shall increase our customers either abroad or at home. After all, it is our own customers we have to consider. As regards foreign customers adopting reciprocity duties that would not help us. I think it would enormously encourage the enemies of Free Trade throughout Europe. I think a war of tariffs, or the fear of it, would endanger 'the favoured nation clause.' But I have another reason why I feel perfectly sure that it will not be a gain. Now, really I hear a good deal of talk in Bradford, and see a good many letters in the newspapers of this district, in favour of reciprocity. But they all seem to go on this mistaken supposition, that we could monopolise monopolies; that we could persuade the House of Commons merely to put duties upon the goods that come here or compete with our market. If there was any real notion of it being carried everybody would be crying out for reciprocity—that is, for heavier duties—and, above all, producers of food would be crying out. Well the distress is very hard to bear, but how much harder would it be to bear if bread was dear? Just let me conclude by quoting what one of the strongest Tories in the House of Commons (Mr. Charles Sewell Read) said the other day while canvassing—and by the-by I hope he won't succeed. The hon. gentleman advised farmers not to be gulled by the cry which had been raised of reciprocity. 'Let them not suppose that the people of this country would ever allow their food to be taxed, and as this could not be allowed, neither could manufacturers expect to be protected.' Now, there is the real answer to the whole affair. You cannot get it because the farmers won't let you have it, and if they did it would be at a tremendous cost, by their getting the protection of their produce and raising the price of food."



## AN IMPORTANT DECISION.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I enclose a case recently decided at the Court of Queen's Bench, that may have escaped your notice, but which I think of great importance to purchasers of live stock in an open market or fair. I had a narrow escape of being the purchaser of the said sheep, and having been a witness at the trial at Maidstone, I have been much interested as to how the decision would end.

If it had been decided the other way it would amount to ownership having to be proved in all our large fairs and markets before buyers would feel safe to part with their money.

I am, Sir, &c.,  
A KENTISH FARMER.

MOYCE V. NEWINGTON.

This was a case of some interest in rural districts, relating to a sale in a market of sheep or cattle which had been obtained by fraud. It had arisen thus:—The action was to recover the value of a flock of sheep in these circumstances:—On the 30th of October, 1878, the plaintiff, who is a butcher, and is in the habit of attending cattle and sheep markets—being at Maidstone Market—bought of a man named Wale, through a salesman of the market, a flock of 49 sheep, the flock now in question. The purchase was made in the open market, the price was a fair one and was paid. The transaction was a regular one, and no blame attached to the plaintiff in respect of it. It turned out, however, that the sheep had been obtained by Wale from the defendant, who is a farmer, under colour of a purchase; but in reality by false pretences. Professing to buy the sheep at the price of 48s. a head, Wale gave in payment a cheque on a bank at which he had no funds, and kept no account. The cheque was of course dishonoured. A warrant was taken out against Wale by the defendant on the 25th of October, and he was afterwards convicted of having obtained the sheep by false pretences, and it was taken that they were so obtained. It is to be observed that though the sale by Wale to the plaintiff took place in open market, it was admitted that the market, having been recently established by the Corporation (under a local Act) was not one in respect of which the protection arising from a sale in market overt would attach. The sheep were taken to the plaintiff's premises at Seal (which is some distance from Maidstone) and arrived there on the 31st—the evening day. On the 4th of November the defendant, having in the meantime set the police to work, and having learnt what had become of the sheep went with a police officer to the plaintiff's premises and there took possession of the sheep, which were afterwards removed to his own farm. On the 7th of November Wale was convicted at the sessions of obtaining the sheep by false pretences. The question was whether, under these circumstances, the plaintiff or the defendant was entitled to the sheep. The case was tried at the Maidstone Assizes before the Lord Chief Justice, and the question of law was reserved and argued in this Court before the Lord Chief Justice, Mr. Justice Mellor, and Mr. Justice Field, by Mr. Grantham, Mr. Willoughby, and Mr. Arbuthnot.

The Lord Chief Justice had prepared a judgment, which was concurred in by the other Judges, and was now read by Mr. Justice Lush, in favour of the plaintiff, the purchaser of the sheep. Although, he said, if the matter rested on abstract principle, it might be open to contention that as to make a valid contract both parties must intend to be bound by it, consequently where, in an apparent contract of sale the buyer intended to get the goods but not to pay for them, but to defraud the seller, the contract fails to take effect and the property still remains unaltered, yet that question is now so decided by authority as to be no longer open to discussion. We must now take it to be settled that though the seller is induced to sell by the fraud of the buyer, and though it is competent to the seller by reason of such fraud to avoid the contract, yet, till he does some act to avoid it, the property remains in the buyer; and if in the meantime he has parted with the thing sold to an innocent purchaser, the title of the seller cannot be defeated by the original seller. The reasoning on which this conclusion is based may not appear altogether consistent with general principle, and may be best rested

on a principle of equity—that where one of two innocent parties must suffer for the fraud of a third party, the loss shall fall on him who enabled such third party to commit the fraud. But on whatever ground it may be deemed to rest, the law must be taken to be settled. The question as to what act on the part of the defrauded seller short of retaking possession of the thing sold would suffice to defeat the contract does not arise in this case. The defendant, not knowing what had become of the sheep, or where to find Wale, the buyer, had done and could do nothing, beyond giving notice to the police, up to the time when the sheep were bought by the plaintiff. Therefore, but for the subsequent conviction of Wale for having obtained the sheep by false pretences, no question could be raised as to the title of the plaintiff. But it was contended that, by reason of such conviction, the defendant is entitled to the benefit of the provision in the Larceny Act, 24 and 25 Vic., c. 96, s. 100, which enacts, "If any person guilty of any felony or misdemeanour in stealing, taking, obtaining, or knowingly receiving any property shall be indicted for such offence by or on behalf of the owner and convicted thereof, in such case the property shall be restored to the owner." But this has no application to such a case as the present. The terms of the enactment apply only to cases in which the possession has been obtained without the property passing. This view has been already taken by this Court in the recent case of "Lindsay v. Gundy," and we have no hesitation in adhering to it. In the present case, as in the other, there was no property in the prosecutor at the time of the conviction. It had been parted with by a contract, which, though voidable under the circumstances, ceased on the sale, before it had been avoided, to be any longer voidable; and as to which therefore, the right of the plaintiff had become inalienable. It cannot have been the intention of the Legislature to defeat it nevertheless, and by the mere conviction of the fraudulent purchaser to deprive the innocent buyer of the right which, according to the decisions, had become absolute. Our judgment, therefore, must be for the plaintiff.

A HEALTHY FAMILY.—John Gordon, who died near Turiff, Banffshire, some time ago, attained the remarkable age of a hundred and thirty-two years. All the travellers who chanced to call at the neighbouring inn of Turiff were uniformly directed by the landlady, Mrs. Wallace, to the cottage of the patriarch, where they would see, she used to say, the oldest man in Banffshire—"ay, or in the world." Among the visitors, one day about the close of harvest, was a young Englishman, who, coming up to the door of the cottage, accosted a venerable-looking man employed in knitting hose, with, "So, my old friend, can you see to knit at your advanced period of life? One hundred and thirty-two is truly a rare age!" "Deil's i' the man, it will be my grandfather ye're seeking—I'm only seventy-three. You'll find him round the corner o' the house." On turning round the corner the stranger encountered a debilitated old man, whose whitened locks bore testimony to his having long passed the meridian of life, and whom the stranger at once concluded to be John Gordon himself. "You seem wonderfully fresh, my good sir, for so old a man. I doubt not but you have experienced many vicissitudes in the course of your very long life." "What's your wull, sir?" inquired the person addressed, whose sense of hearing was somewhat impaired. The observation was repeated. "Oh, ye'll be wanting my father, I reckon—he's i' the yard there." The stranger now entered the garden, where he at last found the venerable old man busily employed in knitting potatoes, and humming the ballad of the Battle of Marston. "I have had some difficulty in finding you, friend, as I successively encountered your grandson and son, both of whom I mistook for you; indeed they seem as old as yourself. Your labour is rather hard for one at your advanced age." "It is," replied John, "but I'm thankful that I'm able for't; as the laddies, pair things, are no vera stout noo." The united ages of the worthy trio amounted to upwards of three hundred years.—*Ayr Advertiser.*

A DISTINCTION.—"So," said a young lady, recently, to a merchant in Philadelphia, "your pretty daughter has married a rich husband." "Well," slowly replied the father, "I believe she has married a rich man, but I understand he is a very poor husband."

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## ENGLISH AGRICULTURE IN 1878.

(From the *Mark Lane Express* of December 30.)

For the fourth time consecutively it is our thankless task to sketch the agricultural history of a year which has been, generally, one of failure and disappointment. In another week our crop returns will be published, and we shall then have before us details which will enable us to see the results of last harvest in different parts of England and Wales; but, unfortunately, we need not wait till then before declaring the general result to be unsatisfactory. Although the crops of 1878 were undoubtedly less deficient than those of 1877, prices have ruled so much lower that there is little if any improvement in our farm balance sheets, except in a few favoured districts in England and in Scotland. We do not need exact statistics to show that such is the case, because we have other evidence in the forms of lowered rents, vacant farms, and bankrupt tenants. The misfortunes of four deficient years have culminated in an agricultural depression which is as unquestionable as it is lamentable, and it would be worse than useless to attempt to ignore the gloominess of the farming outlook by turning our eyes away from it. During the early portion of the year there was reason to hope that a brighter prospect was before the farmers, and it was not till long after the harvest had been completed that sanguine critics were convinced of the errors of estimates which they had maintained in spite of the objections of more careful observers. The wheat crop looked remarkably well till it came into ear, and even then gentlemen who report on crops from an inspection taken from the windows of railway carriages, or otherwise from a distance, could find nothing but good to say of it. It was only by going into the standing corn, and examining the ears, that the delusive appearance of the full-strawed crop could be assessed at its true value, and this is precisely what nine crop-reporters out of ten apparently never do. After all, however, wheat yielded much better than it had done for the previous three years, and if it had been well harvested and sold at remunerative prices farmers would have had something to be thankful for as far as that crop was concerned. Barley, oats, beans, and peas were all sown under favorable conditions. We had a mild and suitable spring, and the crops were sown in good time. Until the last week in March everything was favourable to an excellent harvest; then we had sharp frost followed by snow and a good deal of rain. Nearly all the spring corn had been sown, but a flood so soon afterwards had a very injurious effect upon all but the lightest land, barley and oats being especially placed at a disadvantage. April was a rather wet month, and in the second week in May a serious flood occurred which did great and irreparable damage to the growing crops, and particularly to the cereals. A generally wet period followed until the third week in June, when we were favoured with a brief spell of brilliant weather. The wet season had produced a very heavy crop of hay; but this was got together under difficulties, and not until a great deal of it

had been more or less injured by wet. The mangel crop, which started well, was injured by the flooding rains, and when a hot dry time came it died off prematurely in those districts where the drought was most severe. But previous to this drought, which occurred in the latter part of July and the beginning of August, we had more rain and cool weather, that is, in the latter part of June. Harvest began in good time, the weather being all that could be desired until a large portion of the wheat crop had been secured in the early districts. Indeed, the crops were somewhat prematurely ripened by the sharp drying of land previously sodden, and by the bright sunshine, barley and oats being especially affected. In the middle of August rainy weather again set in, greatly injuring the barley, and the wheat also in late districts. Harvest was by this means unduly protracted, and stacks unthatched were damaged. Scotland was especially favoured in harvest weather, as, indeed, she had been in the weather generally, as compared with that prevalent in England, during the whole summer. The Scotch crops, therefore, were much better for their part than the English crops, though some of the Northern districts of England were also favoured. For pasture districts the year has been more favourable than for the arable counties, feed having been abundant, and the hay crop enormous. Dairy husbandry, however, has recently shared in the prevailing agricultural depression, chiefly owing to the low price of cheese, the quality of which this year is worse than usual.

Since harvest the weather has been, until recently, generally favourable for farming operations. There was a bright and dry early autumn, when stubbles could be cleaned to advantage. Sufficient rain followed to enable land to be ploughed for and sown with wheat, and the crop was sown in most parts of the country under the most propitious conditions. It is probable that a smaller area has been sown than for many years past, as the rains of the late autumn and the severe weather that set in with the winter first impeded and afterwards completely stopped cultivation and sowing. This, however, was not a matter of great importance, as with present low prices for wheat in view, farmers were careless as to whether they sowed the usual breadth of land with that cereal. Fortunately the land was covered with snow during the period of the severest frost; otherwise the young wheat might have been injured. For about a week before Christmas Day the cold was very severe, and we believe the thermometer has never been so low as it stood on Christmas Eve since the winter of the Crimean War. After Christmas Day a sudden thaw set in, and the weather has since been remarkably mild for the time of year. It is not likely that wheat-sowing will be resumed at present, if at all, as December is one of the worst months in which to sow. If there were any temptation to sow more wheat it would be better to wait till the end of January or February;

but those farmers who have sown less than they intended to sow will probably put in barley or oats instead. Early-sown wheat came up well; that sown late was very slow in appearing above ground; in fact, a great deal was still snug under the soil during the recent severe weather, which was an advantage, as, although it requires a very sharp frost indeed to kill wheat, the plant loses in vitality by being cut off above ground and having to make fresh shoots, as is the case when frost attacks the young and tender blade.

Of agricultural legislation there is not much to record. The only very important measure which passed into law was the Cattle Diseases Bill, which comes into operation on the 1st of January. The passing of this once promising measure in a mutilated form was not the least disappointment of a year full of broken hopes. We need not repeat an estimate of that measure, as it has often been placed before our readers. As it is, the Privy Council appear anxious to make the best of it. The Highways Bill, which is too fragmentary to be of much use, and which pleases hardly anybody, was also passed, chiefly, we presume, as Mr. Redwell said the other day, because the Government felt the necessity of passing something. The County Government Bill, intended to be passed with the Highways Bill, which was a kind of supplement to it, was abandoned, although it had passed its second reading early in the session. The Valuation Bill shared a similar fate. Of Scotch agricultural measures the Hypothec Bill was quietly shelved, together with the usual batch of measures tinkering ineffectually at Game Law Reform; but the Roads and Bridges Bill for Scotland became law. Altogether, a session which opened with many promises of agricultural legislation ended, like the outcome of the harvest, in disappointment.

The straits in which farmers have found themselves after a fourth bad year have led to a general reduction of the wages of agricultural labourers throughout the greater part of England and Scotland. In a few instances, notably in Kent, this reduction has been resisted, and a strike of Kentish labourers on a large scale is, unfortunately, still maintained. By returns, which we collected from the various districts of Kent and the small portion of Sussex affected by the strike, we were able to make public the actual earnings of the labourers, concerning which gross mis-statements had been previously made, and apparently accepted by the press generally. By this exposure the efforts of the Kent and Sussex Union leaders to obtain contributions from the public to enable them to fight the farmers have been to a great extent rendered futile, and thus, we trust, the duration of one of the most unreasonable strikes on record will be materially shortened.

Of men well-known in agricultural circles we have lost by death during the year Mr. Thomas Booth, of Warlab, Professor Johnstone, Mr. Joseph Kay, a well-known writer on the Land Question, Mr. Harrison, of the firm of Harrison and McGregor, Mr. J. K. King, of Coggeshall, Mr. John Howard and Mr. Henry Corbet.

## SONNET.

[TRANSLATED FROM HEINE.]

In foolish error I from thee did stray,  
Thinking the wide world I would wander o'er  
In quest of love,—love that should have the power  
To fill my heart with all-embracing sway.  
In every street I sought love day by day;  
Beseeching hands I held at every door,  
Asking for but one sign of love,—no more;  
But all with scoffing hatred turned away.  
And still I wandered o'er the weary ground  
In search of love,—but love I never found.  
Hopeless and sad, at last I homeward turned,  
And thou didst meet me,—and thine eye's soft glance  
My longing heart with rapture did entrance,  
For there I saw the love for which I yearned.

B, in the *Spectator*.

THE CHRISTMAS PUDDING.—Few things that enter into the programme of an Englishman's Christmas enjoyment are more highly estimated than is the plum-pudding. It is indeed, fearfully and wonderfully made. It has been for weeks the subject of deep consideration by the head of the domestic household, and on the eventful day of its public presentation it comprises the concentration of all culinary cares. It is the mountain of domestic trouble. Cynics who wickedly delight to contemplate the miseries inflicted gratuitously upon the human stomach by its imperial master, find in the Christmas season a pleasurable time for the delocation of their wonted spleen. Glorious as is this wonderful pudding, delicious as its perfume, marvellous as is its appearance, tempting as it is to the hungry expectant, yet it is the concentration of dyspepsia and indigestion. Its best uses when made are to be smelt, enjoyed through olfactory nerves, praised for its remarkable evidence of human ingenuity, and then thrown away. This verdict will hardly be accepted, and yet, no doubt, it is true, but even the writer, with that perseverance that pertains to all the human race, loves, and enjoys plum-pudding, with all the gusto that a ragged urchin does his purloined apple or penny loaf. But the ingredients of the pudding tell a wonderful tale, geographically considered. Still further does it silently describe the many and various processes, both of nature and art, that each ingredient has undergone ere it became fit to perform its proper functions in the great domestic sacrifice. The wheat from which the small modicum of flour contained in the pudding was made, might, for all we know to the contrary, have been grown in the next parish or the next county, or it may have traversed miles of seas from its original soil on the steppes of Russia, or from the great colony of Canada, or from some of the Western States of America. The raisins, perchance, were grown on vines that bask in the Valencia sunshine. The currants, so called, in reality currant grapes, were picked and dried in Eastern Smyrna. The sugar that sweetens it to our taste was raised on the island of Jamaica, in the Western Indies. The spice comes from the tropics. The candied orange and lemon-pel is the produce of fruit that grew, perchance, at Malta or Montserrat. The suet, an indispensable adjunct, and that of the bullock, and not of the wether, may have been laid on in the county of Devon, or in the northern Highlands, or it may have come across the Atlantic within the carcass of some noble American beast. All these suppositions, and even more, are possible, as the origin of that solid fat, without which no pudding is complete. Then the eggs—were they home-laid or "shop" ones? and, if the latter, did they not come from the far off provinces of Normandy, in our neighbouring kingdom of France? Surely there enters not into our domestic life any culinary combination, to produce which a wider radius of geographical expanse has been ransacked, than is found in the construction of our Christmas pudding. As we partake, we think nothing of all these countries and climes, these vast distances, and remote places. It is a time for pleasure and for enjoyment, but none the less should we enjoy ourselves if we now and then rendered up thanks for the many and varied blessings by which we are surrounded.—*The Gardener's Magazine*.

# THE AGRICULTURAL LABOURER.

BY THE COUNTESS OF STRADBROKE.

The friends of the agricultural labourer could hardly have selected a worse moment than the present for raising a grievance as to his position and wages, or for persuading him to quarrel with the latter and strike against his employer. That these mis-called friends are doing so in many parts of England argues great ignorance on their part of agriculture itself, of the needs of the farmer, and the true position of the labourer.

The latter might bitterly exclaim with the traveller in *Æop's* fables, "Heaven defend me from my friends," for they are really putting him in a worse plight than they found him. It may be remembered that four years ago a similar agitation was raised on the subject of the hardships and grievances of the labouring man, chiefly as employed in the Eastern counties. A party professing to be influenced by purely philanthropic and disinterested motives, and who boasted amongst their adherents men of undoubted talent and integrity, such as Mr. Morley and the Bishop of Manchester, loudly and roundly asserted that the agricultural labourer was an ill-used and much-put-upon being, and urged him to resist this tyranny and to join unions by whose help he would gain power to strike and refuse to work at seasons most inconvenient to his employer. The result of this well-meant but ill-judged attempt to secure his fancied rights to the labourer was signal and utter failure. A large body of men were enlisted, the delegates of the unions travelled about from pillar to post, ale-houses and village greens were scenes of perpetual declamation and angry invectives against the farmer, the landlord, the clergy—all in fact who in any way reaped the fruits of the soil. These delegates were as keen about picking up recruits as any recruiting-sergeant, and as gay with their ribbons, drums, and trumpets. But the excitement soon died out. The wives of those who joined the union were not long in finding that the twopence to be paid weekly to the funds ended in a shilling spent at the alehouse, and that the nine shillings a week union pay for lifeless idleness was a sorry substitute for the hard, well-earned wages of the farmer; and when harvest time, 1874, came, and they found their masters could after all at a pinch get on without them, and that the unions to whom they trusted declined to give further pay—one and all, with some very few exceptions, humbly but thankfully returned to their former employers (such as would take them on), withdrew their subscriptions, and the "missuses" gladly tossed the union tickets behind the fire.

So there was an end of that agitation, and things have gone on quietly in the Eastern counties ever since. But did the labourer gain anything by it? Has it left him better off than before? That is the question Mr. Morley, Bishop Fraser, and the other agitators ought to ask to have solved before recommencing the same operations in other counties. Is he better paid? Does he inhabit a better house? and is he altogether in a better position in the social scale now than in the year 1874.

We emphatically answer "No." His wages are precisely the same as in that year. Improving landlords have gone on improving their labourers' cottages, and careless or impetuous landlords have left their tenements in *statu quo*; and as to his position in society—well, "Hodge" remains "Hodge," and will do so to the end of the chapter. But—and here comes the rub—though no material good results have accrued to the labourer through the interference of his self-styled friends, the evil which it brought is great and lasting; an estrangement sprang up between the two classes, employer and employed, the farmer and the labourer, which has not been, and probably never will be, healed. Up to that period (1874) the relations between the two (we speak of the Eastern counties particularly as the *then* scene of action) had been friendly. The farmer gladly helped his poorer brother; he never begrudged him ale at harvest, or money for his clothing and coal and blanket clubs at Christmas. If a labourer was sick, or had a delicate wife and many small children, it was a rare case if the farmer for whom he worked did not send help in kind—meat, soup, flannel, &c. so forth. Now the case is altered; matters are on a very different footing.

The independent stand made by the labourer at the instigation of his mistaken friends has drawn a hard and fast line between the two classes. The farmer and his labourers are

no longer bound together by one interest; each defends his own right. We grieve to say it, but "every man's hand is against his fellow." Work is grudgingly done, and grudgingly paid for. In place of heartiness, sympathy, and friendly feeling, there exists only mistrust and suspicion. Well-meant kindness would be now called bribes to tamper with the independence of the sturdy son of the soil; and on the other side the feeling of goodwill is checked and nipped in the bud by the frost of the ingratitude and suspicion with which the poor man has been led to look on the acts of his employers.

And now, when bad times have come on the farmer, through the introduction of vast quantities of cheap foreign corn, combined with heavy taxation at home, the labourer finds himself in many respects in a *worse* condition than formerly. The farmer no longer hesitates to pay off superfluous hands, which in the old times of friendliness and goodwill he was always loath to do. Wet days are taken off, short days receive less pay, and the little aids which were scarcely missed by the labourer's family in the days of prosperity and regular work would now be a boon which can never again be obtained. The seeds of defiant independence and class opposition sown by his mischievous friends have taken deep root and produced bitter fruit—the Dead Sea apples of dust and ashes, discord and ill-will.

A vast deal of false sentiment has been uttered and an immense amount of trash talked on the "independence of the agricultural labourer." By the nature of things he cannot be a wholly independent being. Unskilled in hand or head, he must work by the sweat of his brow, and must depend for his bread he eats on the employer for whom he toils; to move his locality is only to move his home and the scene of his work, and would very little improve his position. For the rate of his wages must depend on the value of his labour, and as that is pretty even in the long run all over England, very little would be gained by change from place to place. Where wages are higher it will be almost invariably found that the cost of living and the house-rent are higher also in proportion. And one point which has always told enormously in favour of the farmers in the occasional struggles between them and their labourers, is that the cottages are in their hands, so that if the labourer refuses to work or declines to do so, the farmer has it in his power to turn him out of house and home and put in another man. This alone, without other reasons, would prevent the labourer from being what in the favourite cant term of the day is called an "independent man." He depends on his master for work, wages, and home.

As before said, the month of December is about the worst time of the whole year for the labourer to strike for his own interest. He cannot compel the farmer to employ him on wet days or give him the same wages for short hours as for long ones; but the farmer can compel him to turn out of the house he has put him into; and if in the strife between the two these harsh measures are resorted to, the blame of all the misery and desolation which will fall on the wives and children of these poor homes must rest on the heads of those who have assumed the devilish part of working up the angry passions of one class against another.

Hodge is naturally a peaceful man; if he has a good master and regular work he is a happy and contented one and in a certain way he is a reasonable being. He has quite common sense enough to see that if bread is unusually cheap the flour of which it is made must fetch a very low price, and therefore that his master, who suffers by the loss in his production, cannot afford to pay him the same wages as when flour is high. He does not grumble at this, because he gains personally by the low price of bread and flour, his principal article of consumption; nor at being paid a few pence less per day for doing eight hours' work instead of ten. He knows his own business much better than those who interfere with him. But when outsiders come down and assure him with blatant tongues at flattering words that he is not fairly treated; that his master "making money out of the sweat of his brow;" that if he resolves to make a stand he can demand and obtain fixed wages wet or dry, short or long days; and that when he does choose to work or cannot work (for this is one of the false promises the delegates hold out) he will be well paid by the labourers' union instead of taking his chance of the work when he believes them! His natural credulity and ignorance incline him to listen to the flattering tale, and he quickly falls in their toils. Alas for his chance, then, of independence. He is doubly bound. No longer can he serve his own master

work for whom he chooses. This the men in the Eastern counties found to their cost. As long as any of the members of their union were on strike, the others were not allowed to work; and many of them confessed afterwards that the enforced idleness, "sitting with their hands in their pockets all day long, with naught to do, was the sorest punishment that could be inflicted on them, and more than they could bear." The unfortunate, deluded, misguided men now on strike in Kent and Sussex have yet to learn the miseries of being tied and bound hand and foot to a "union." It is the hardest task-master they have in all their poor lives ever had to deal with.

The great question of the day for those who are truly interested in the agricultural labourer is, Does his position demand and admit of improvement? If so, by whom and by what means can this be brought about.

We will not touch on the amount of wages he receives; that depends on the state of the labour market, on supply and demand, and on many local questions; nor on the present one-sided free trade system, which so greatly reduces the farmers' profits, and obliges him closely to count the cost of every penny of expenditure, largely amongst which must figure his labour bill. These are topics of a much wider scope than that which we are now considering—the condition of the agricultural labourer *pur et simple* in English, and how, if at all, it can be improved under existing circumstances.

The two great springs of action in the human mind are undoubtedly hope and self-interest. Give a man these, and you at once raise him in the social scale; withhold them, and he sinks into a state of apathy and stagnation. And this is the real tangible grievance of the agricultural labourer, namely, that he has no motive or object of *self-interest* in throwing himself heartily into his work, no hope of bettering his condition by so doing.

How can this be remedied, and these motives supplied? Certainly not, as the unionists would have him to believe, by setting himself against his master and separating himself from his interest. On the contrary, combination and co-operation between servant and master would be vastly best for the interest of both. If on every farm in England the lowest labourer could feel that he may work his way upward, and that by good steady industry and diligent application to what he has to do, in fact by doing his *best*, he can raise himself into a better position, the work itself would be very differently performed. Half the bad and unprofitable farming in England is due to slovenly work and work wasted by being behindhand, done out of season, without interest or energy. Let the ploughboy feel he shall one day be exalted into head horseman, the herd into chief shepherd, and the tender of cattle into head yardman, and one and all will strive to learn their work and improve in it by doing it *well*. If the horse-driver, and shepherd, and yardman in their turn are allowed the privilege of some little share in the profits of their respective charges, the farmer would soon find his horses, pigs, sheep, and cattle thrive and flourish to an amazing amount. Some wise farmers do now pursue this plan, and excellently it pays them, as well as their men. At the tailing of lambs the chief shepherd gains 6d. per lamb for his share of the anxiety and care during the lambing season, the yardman gets a pig out of every litter of ten that sell for £1 a-piece, and the horse-driver receives a like proportion for every coomb of corn sold *profitably*. Thus the master's interest becomes the servant's, the profits of the former benefit the latter, and for every shilling bonus the farmer gives he gains five. These bonuses must be quite separate and apart from actual regular wages, and only given strictly to the good and faithful servant. Another method of connecting the interest of the labourer with that of his master is by giving every possible amount of piece-work. The good industrious workman feels in doing piece-work that he is fairly and honestly paid for what he does, and that he gains a higher week's wages than the idle and lazy. Many easy jobs which cannot be done by measurement should be reserved for the old and feeble and paid by the day. The landlord also may do much in assisting the labourer to rise in his own little world. On any large estate holdings of from four to twenty acres might be profitably farmed by little men who, by economy and frugality, have saved wages enough to start a small business. No greater encouragement could be held out to a good labourer than this, and these small farms should be carefully reserved as rewards of merit. They would be no loss either to the landlord. French

produce amply proves the benefit of hand tillage and the careful culture of small holdings. Cows, pigs, poultry, and egg would increase all over the length and breadth of England if small farms were allowed in moderation on every estate; and these should be strictly confined to men from the labouring class, and of those, such as have money in the saving banks.

Lastly, what can be held out to the agricultural labourer as his *hope* for old age? It is in the nature of all men to look forward to a calm and peaceful ending of their days. The nearer the approach to the eternal resting-place, the dearer becomes the earthly home—the more closely do we cling to what has been the scene of our joys and sorrows.

The greatest trial and drawback of all in the agricultural labourer's life is the uncertainty of his old age. In nine cases out of ten the workhouse or starvation looms dimly before his imagination when the days come, as come they must to us all, "when the grinders cease because they are few, and those that look out of the windows be darkened." Is there no remedy for this? Amongst all the high-flown ideas and florid notions of the labourer's friends, not one suggestion has been made to supply this the greatest need in his life, the certainty of a tranquil happy old age. And after all the remedy is not far to seek. By the Poor Law of England no man is allowed to starve, but a great and rather natural (considering that the farmers have to bear the expenses of idle *vagrants* who tramp about the country out of employment) repugnance is felt by the guardians of parish unions to administering out-door relief. If the rule were strictly carried out that only indoor relief should be allowed to able-bodied men and women, the outdoor relief might be devoted—*consecrated* we may almost call it—to the aged labouring man and his wife.

If every man who had passed an honest and good life in his parish and had not received relief in his youth, on arriving at the age of three-score and ten years, should receive without doubt or hesitation, as his right, a sort of pension, two shillings a week and a stone of flour weekly, in recognition of his past labours, for the rest of his life, the labourer would be a happy man. It would encourage him to save, instead of, as by the present regulations, discouraging him to do so—for the aged man who has a small pittance of his own may not have relief by the present law—and with assistance from his children, who are now deterred from helping him, lest the money they give should prevent his claiming any parish assistance, and it would above all things tend to make him feel independent. It is a wretched thing for a man who has earned his bread honestly in health and strength to look forward to a pauper old age, and what he dreads most, a pauper's funeral. This outdoor relief, given as a right to the old labourer, would encourage him to save and to lay by, and to add to the income of his old age, and would be an economy to the ratepayers by keeping young people off the parish. We commend these few hints for the amelioration of the state of the agricultural labourer to the farmer, the landholder, and the Government of the day.

That "the poor will never cease out of the land" we know from the highest authority; but the agricultural labourers are not of these, though amongst their families may always be found the sick, the aged and infirm, for the charitably inclined. Give him the fair wages of the day, a good cottage, *self-interest* in his work, and hope for his old age, and he is as happy and light-hearted as any creature on God's earth. His greatest temptation and drawback is the alehouse. That which race-courses and gambling-houses are to the middle and upper classes, the public-house is to the labouring man. His best friends are those who give him interests away from it, and persuade him to save his shillings instead of spending them there—and a wife who brews good beer at home! His worst enemies are the men who, under the cloak of pity and compassion, make him quarrel with his bread, and afterwards turn him into the gutter. The labourers' union cannot provide him with work when turned off by his master.

One word in conclusion as to emigration. Those who recommend it must know that it cannot be a *remedy* for any existing evil in the condition of the English agricultural labourer. There must ever be cultivators of the soil, and in this over-populated country, hands will always be found of one sort and another who can dig and plough. Emigration to the individual himself may or may not be a boon. In more than half the cases of labourers who have emigrated to Canada and

Australia they have been far poorer and more wretched out there than at home. A man to do well in the colonies must have energy and perseverance, and with these qualities he will also thrive in England. In great towns no doubt emigration is a healthy drain and relief, but in agricultural districts the good workman can always command work, and though his wages may be less than in the colonies, the cost of comforts and even necessities is so much greater, and the education of his children so difficult, that he will not gain by the change.

Finally, good landlords must secure good farmers, and good farmers will command good labourers. Let all these classes be united in one solid compact "agrot of sticks," and no discontented outsider will have power to disunite them. Let their motto be "Union of masters and men," instead of "Union of men against masters," and the agricultural districts will be once more restored to peace and quiet, and the labourers live happily together with their wives and children in the homes where they were born, instead of tramping about the streets of London in the pitiable position we have lately seen—homeless and workless—a miserable spectacle for gods and men.—*Fanny Fa*

### LIVE STOCK IN QUARANTINE.

The following is a Memorial to the Lords of the Privy Council from some of the leading exhibitors at the recent Paris International Exhibition of Live Stock:—

"Unto the Lords of Her Majesty's Most Honourable Privy Council. The Memorial of the undersigned exhibitors at the Paris Exhibition of 1878,

"Humbly sheweth,

"That your memorialists, being exhibitors at the late International Live Stock Exhibition held this year in Paris, beg most respectfully to lay before your Lordships the treatment they received during the quarantine of their exhibits at Brown's Wharf on their return from said Exhibition.

"That your memorialists had placed themselves and their stock for exhibition entirely in the hands and under the protection of your Lordships. That symptoms of 'foot-and-mouth' having appeared among their exhibits, these were put under quarantine, in terms of law, upon their arrival in London at the aforesaid Brown's Wharf, Wapping. That the memorialists had no option, being under the protection of your Lordships, and that these premises were specially provided for their (the memorialists') cattle, by order of the Privy Council. That the premises thus assigned to the memorialists for the accommodation of their stock were entirely unsuitable for that purpose. That the said Brown's Wharf is a building entirely unfit for the shelter of valuable stock. That the part of it assigned to your memorialists for the use of their stock included that portion known as the 'condemned cell,' the last occupants whereof had been cattle quarantined or rinderpest. That in this building there was no ventilation above or below, and that the backs of the larger cattle nearly touched the roof. That your memorialists' cattle, having been thus quarantined in this place, received no attention save what their owners and attendants personally gave them. That undue authority was exercised almost tyrannically by the 'wharfinger' or other agent in charge of this wharf. That, for instance, your memorialists were told imperatively that they were all under his orders, that he would be obeyed, and that not a beast should be removed from the 'condemned cell,' even to make room for the others. In reference to this, your memorialist, the undersigned William M'Combie, communicated with the most noble the Duke of Richmond and Gordon, who had the kindness to issue orders for their instant removal to another part of the building.

"That the said Brown's Wharf belongs to the General Steam Navigation Company, London, and has, from the dulness of trade and other causes, been entirely unused and in disrepair for a considerable period (15 months). For bare standing-room in this deserted and unsuitable building, your memorialists were charged, and compelled eventually, under the threat of detaining their beasts, to pay 5s. per head per night for the first four, 2s. 6d. per head for each of the following eleven, and 2s. per head during the last twenty-five. The undersigned William M'Combie, under protest, paid as follows, on account of his eight exhibits while on quarantine at Brown's Wharf:—

"From the 21st to the 25th of June, at 5s. per head per

night for eight cattle, 28; from the 25th of June to the 9th of July, at 2s. 6d. per head per night for eight cattle, 214; from the 9th of July to the 3rd of August, at 2s. per head per night for eight cattle, 240; total, 242.

"For the same number of exhibits (the most valuable one of which, however, died before the end of the quarantine) another of your memorialists—viz., Lady Emily Pigot—paid 248.

"These charges were levied by the General Steam Navigation Company, as the appointed agents and with the apparent authority of your Lordships, and were paid accordingly by the memorialist, the said William M'Combie, under protest, the other exhibitors also paying the sums levied from them, and were for bare standing-room alone, neither attendance nor food being supplied by the company's servants. Exclusive of the above sum paid for standing-room, upwards of £20 was paid for food for the same eight exhibits. It will thus be seen that the company received a rental of 25 5s. per head from all the cattle thus quarantined (without reckoning what they likewise extorted from the sheep owners for the use of their premises), and that your memorialists had to pay at the rate of 28 per head for food, altogether £14 per head, still exclusive of attendance.

"Your memorialists beg respectfully to submit that these charges are extortionate, unjust, and excessive, which your memorialists are prepared to prove by the unimpeachable testimony of practical men. At Southampton, where a limited number of the Paris exhibits were likewise quarantined, the charge was at the rate of 9s. 10d. per head per night, including green food, hay, litter, and as much cake, corn, or meal as the animals required, and adequate attendance also. At Deptford, another quarantine station, the charge is 5s. per head for ten days, including landing and all other charges for attendance and keep, and after ten days 1s. 6d. per night, with food and attendance. At Brown's Wharf 'attendance' likewise was an extra charge. It will be observed that an animal could not be kept as those Paris cattle were at Southampton for less than 18s. per week, including attendance, and that by this calculation the charge at Southampton for standing-room was under 6d. per head per night in place of the 5s., 2s. 6d., and 2s. imposed upon the memorialists at Brown's Wharf.

"The memorialists are gratefully aware that every exertion was made by the Royal Commission to the Paris Exhibition to have these charges rebated into reasonable limits. To Sir Philip Cunliffe Owen, the Secretary of the Royal Commission, the British exhibitors of live stock at Paris are deeply indebted, not only for the general success which has attended his efforts on their behalf and for the interest and kindness he has shown them, but for his indefatigable exertions to secure them on this point from the extortionate overcharges at Brown's Wharf. The General Steam Navigation Company have chosen, however, to ignore his remonstrances, although they were informed that it was the desire of His Royal Highness the President that the exhibitors of live stock at Paris should not be thus subjected to such unreasonable charges, and although Sir Philip Owen, in the course of a lengthy correspondence and personal interviews with them on the subject specially pointing out the responsibility they were assuming, warned them of it, and of the necessity they lay under on their part of coming to a fair and reasonable arrangement with the exhibitors. Your memorialists, being those exhibitors and the owners of the Paris stock thus quarantined, while under the protection of the Royal Commission and your Lordships, were helpless and altogether at the mercy of the company as to the charges they imposed.

"The officials of the company who exercised authority over your memorialists at Brown's Wharf behaved in an unnecessarily high-handed manner, and assumed a most overbearing attitude to your memorialists and their servants in attendance there.

"The following is an extract from a memorandum which was addressed to one of your memorialists on the subject of 'exercising room':—

"In reference to the letters of Sir George Macpherson Grant and Mr. William M'Combie, I have made inquiries of the inspector at Brown's Wharf who has charge of the animals placed there in quarantine, and he informs me that a fresh case of foot-and-mouth disease was detected this morning in a ewe, and that eleven sheep are still affected.

"It appears that for the first three days after the arrival of

the animals the cattle were regularly exercised; since that period many of them have been unable to take exercise on account of their being affected with disease in their feet.

"Ten cattle having been slaughtered since their arrival, and there is now not only more space for their lairage, but they could be easily led about for exercise should the owners desire to do so, without extending the present boundary of the quarantine station.

"The inspector states that the premises were yesterday visited by the Marquis of Exeter, who expressed himself perfectly satisfied with the arrangements provided.

"In reference to the charges, he informs me that they are now reduced one-half—viz., 2s. 6d. per head for cattle, and 1s. 1d. for sheep per diem—and that the General Steam Navigation Company are at considerable expense and trouble in keeping the premises well cleansed and disinfected; and, although the rate of charges appears to be high, it must be borne in mind that the premises are of very considerable value.

"It is true that the premises have not been in use for some considerable time (about fifteen months), but they were on that account more readily approved of, as the germs of disease were less likely to exist there. They are, however, very lofty, and, being next to the river, easily kept cool and healthy.

"ALEX. C. COPE.

"July 11, 1878.

"I am not aware that the inspector is practically acquainted with the requirements of such cattle, and I do not suppose that he has had any experience as to the treatment of valuable show-yard breeding cattle. He reports that the cattle were regularly exercised. This statement is incorrect. They were not exercised, nor had they at any time during the quarantine space in which to be exercised; and the nature of the ground rendered it dangerous and unsafe even to untie the cattle. By the statement in the above memorandum, a reasonable request for additional space was refused by the Privy Council, though this was especially requested. The space within the quarantine boundary was not enlarged. I am aware that the duty of your inspector was to watch and report to the Privy Council the health and state of the animals undergoing quarantine; but I am not aware that the inspector had any instructions from the Privy Council to advocate the exorbitant charges before referred to of the General Steam Navigation Company. And without instructions, to say the least, it was very officious on his part to concern himself in favour of the General Steam Navigation Company and against the interests of unfortunate exhibitors in a matter with which he had nothing to do.

"Your memorialists having risked their valuable stock, under the protection of your Lordships, in a dangerous journey to the Paris Exhibition, feel that they have been unjustly and ungenerously dealt with.

"May it therefore please your Lordships to take this memorial into consideration, and thereafter to issue an order granting the memorialists redress in respect of the charges so improperly exacted from them, and on the heavy charges for food and attendance, and preventing the repetition of such exorbitant charges in future, or to do otherwise as to your Lordships may seem proper.

WILLIAM M'COMBIE.

"And on behalf of:—

"Lord Bective.

"Lady Emily Pigot.

"George Fox, Esq., Elmhurst Hall.

"W. G. Farmer, Esq., Hinckley.

"George Bruce, Esq., Alford.

"Christopher Naylor, Esq., Newton.

"John Robson, Esq., Orton.

"Robert Bruce, Esq., Great Smeaton.

"Tillyfour, Aberdeen, N.B., December 24, 1878."

AN INVITATION.—"There will be a turkey buried at my house on the 28th. You are respectfully invited to attend." is the latest and most fashionable way of inviting a friend to take Thanksgiving dinner with you.—*Philadelphia Chronicle*.

A YOUNG man from Auburn, N.Y., who went to the Black Hills this spring, has telegraphed to his father, "Fatted calf for me."

## VALUE OF ROOTS AS FOOD AND MANURE.

The following paper was read at the November meeting of the Cirencester Chamber of Agriculture.

Professor CHURCH, who illustrated his remarks with several diagrams, and also rendered his paper the more interesting by making use of a black-board, said: I may at once say that for purpose handling but a very small section of this very large subject, and that I shall consider the matter mainly under one aspect, the true composition of roots. A few preliminary explanations are necessary as a beginning. All foods have to be valued, not only according to their absolute richness in the several constituents of food, but also in regard to the ratio which these constituents bear to each other. As these constituents may all be regarded as nutritive, though in different degrees, it is convenient to speak of them as *nutrients*. There are six:—(1) water; (2) flesh-formers of nitrogenous matter or albuminoids; (3) starch, sugar, and carbohydrates; (4) oil and fat; (5) fibre; (6) mineral matter or ash. My chief object is to bring before you the results of some analyses of roots which have been made by an improved process. These results mainly touch the 2nd item of our list, flesh-formers, but they seriously alter the accepted theoretical value of roots as food by showing another kind of error in our estimates of their feeding value, an error in the ratio between this 2nd group of nutrients, or the flesh-formers, and the 3rd and 4th groups taken together, or the heat-givers. Incidentally I shall allude further on to the functions and uses of most if not all of the six groups of nutrients, but it is expedient to explain at once what is meant by this ratio in question. I shall call it the "nutrient ratio," and to avoid decimals shall assume that we are always dealing with 10 parts (be they grains, ounces or pounds, or mere abstract quantities), of flesh formers or nitrogenous compounds of vegetable origin, but like the albumen of eggs, the casein of cheese, or the fibrin of meat. If we look at those kinds of natural herbage which best sustain the health and growth of our farm animals; if we look at those artificial foods which brings them to an early maturity, we shall find that the nutrient ratio shows a high proportion of flesh-formers. But the range is very extensive—from 8 to 10 in deoartified groundnut cake to 200 to 10 in sugar beet. The richest pasture grass will give 38 to 10, the poorest 90 to 10. We cannot fix a nutrient ratio which shall be equally adapted for all animals at all stages of the feeding process, but we can ascertain by direct experiment what ratio gives the best result in the particular circumstances of each case. To calculate the nutrient ratio we add together the percentages of starch, of sugar, and of all other nutrients of the same group, called the carbohydrates; then we multiply the percentage of oil by  $2\frac{1}{2}$  and include the result in the total sum of heat-givers. The percentage of flesh-formers having been ascertained by analysis we arrive at our ratio by a simple sum of proportion. Now the chief cause of these calculated ratios being wide of the truth in the case of roots and succulent fodder plants arises from the simple fact that it has been the habit of agricultural chemists to reckon all the nitrogen found in these foods as existing in the useful form of flesh-formers, while in reality this is not the case. On two former occasions (1873 and 1874). I pointed out this fact to the Chamber, and it has a last attracted general attention. I cannot claim the credit of discovering this fact, for Lawes and Gilbert pointed it out with distinctness in a paper read before the British Association so long ago as 1852, from which I give some extracts:—"Thus the column of nitrogenous substances consumed, is obtained by multiplying the amount of nitrogen by 6.3 on the assumption that they all exist as protein compounds. This method of estimation will, we think, be found sufficient for our present purpose; though, as we shall have occasion to point out further on, it is frequently far from accurate, and especially when applied to succulent vegetable substances. . . . There can be little doubt that the method of estimating the amount of available nitrogenous substances from the percentage of nitrogen must be more or less faulty, both in the case of the succulent turnips of the first series, and in that of the also unripened produce—clover chaff—of the second. . . . But apart from the question as to whether the increase of the fattening animal has a closer relationship with the amount of the true protein compounds or within certain limits of the available non-nitrogenous constituents of its food

we have here a striking illustration of the inapplicability on other grounds of the percentage of nitrogen as the measure of feeding value, or indeed of any analytical method, unless a detailed determination of the proximate compounds, when succulent products, such as in this instance, the roots, are the subjects of experiment." But I believe my analyses were the first direct determination of the real flesh-formers in roots. Having devised a new process for washing away all nitrogenous matters other than albuminoids, and then determining the real percentage of the latter, I was able to obtain results much nearer the truth than any previously published. In a paper printed in October, 1875, both in the *Agricultural Students' Gazette* and in the *Agricultural Gazette*, I gave some of my results. I then announced some startling corrections of the current view obtained in 1874, but almost too startling to secure my own belief at that time. But other methods in the hands of foreign chemists have confirmed my figures, I was able to say that the mangold must be placed below the swede, and even the turnip so far as richness in flesh-formers was concerned, the comparison being made with roots grown side by side under precisely the same conditions. My mangolds showed less than one-fourth of the flesh-formers with which they would have been credited, had the ordinary process of analysis been followed. I do not mean to affirm that such a result would be invariably obtained, but subsequent experiments enable me to say that from one-third to three-fourths of the nitrogen of this root exists in forms useless for food, though excellent as manure. This fact of course obliges us to alter the nutrient ratio. To show how far the new results differ from the old, I give these numbers—

## FLESHFORMERS IN MANGOLDS.

Variety of Root.	Water.	Flesh-formers by old process.	Flesh-formers by new pro.
Feeding Beet	94.0 p. ct.	1.432 p. ct.	0.63 p. ct.
Yellow Globe	93.7	1.025	0.58
Long Red	91.5	1.080	0.51
Golden Tankard	90.1	1.510	0.57

These roots were exceptionally large and watery, so that these figures must not be taken as representing the average richness of these varieties of mangolds. Yet the above percentages confirm the statement that half of the assumed flesh-formers of mangolds may be non-existent. Of 12 analyses published in 1876-7 of different varieties of mangolds, and given in the German Yearbook of Agricultural Chemistry, the lowest assumes 0.92 per cent. of flesh-formers, and the highest 1.75, the mean being 1.32; it is probable that this number should be halved to represent the truth. What influence such halving has upon the nutrient ratio will be considered presently. I will now say a word or two about assigning money values to food. I have gone upon the plan (merely for the sake of comparing similar foods) of deriving my figures from the commonest cattle foods, with the market prices of several of which they fairly coincide. I assign 1d. per pound to starch and sugar, 2d. to flesh-formers, and 2½d. to oil or fat. Wolf gives—

- 10 Centimes the kilogram to starch, &c.
- 25 Ditto oil and fat.
- 60 Ditto flesh-formers.

These would be rather under—

- ½d. lb. to starch, &c.
- 1½d. lb. to oil and fat.
- 3d. lb. to flesh-formers.

These values are derived not so much from market prices of farm products and purchasable cattle food, as from theoretical considerations as to the nutrient ratio. The value of flesh-formers is assumed to be six times that of starch and heat-givers, in inverse proportion to the generally best ratio of the two nutrients, 1 to 6. I have not time to dwell farther upon preliminary matters, but must hasten on to apply the principles of valuation I have mentioned, employing some of my new results to illustrate my points of view. These results are not to be understood as final, or average, but they will serve for my present purpose. Since I shall have to use the case of the sheep as an illustration of the food-requirements of farm animals and of the number of minute and apparently trivial circumstances which have to be taken into account when we look beneath the surface, at what we may call the philosophy of feeding, I may now proceed to give, in as plain

a form as possible, some of the results of scientific experiment on feeding sheep. Sheep averaging 105 lb. a piece and a year old, fed upon nothing but meadow hay, a trace of common salt and water, consumed every day four ounces of flesh-formers, but reained only 190 grains, less than half an ounce this is 11 per cent. Of this, 130 grains was added to the muscular substance of the animal, the rest to the wool. The increase in the total live weight was not more than 1 lb. 1½ oz. per head per week. Of 100 lb. of total food and drink consumed 70 lb. were water, a proportion rather lower than that contained in the best meadow herbage, the natural food of sheep, in which the percentage varies between 75 and 78. When the same grass was given in a green state, and therefore having a due proportion of water intimately associated with its whole substance, then not only was more of it consumed, but a better use was made of that eaten. Yet the nutrient ratio was the same in both experiments—80 to 10. Now one of the great benefits conferred by the introduction of roots as sheep-feed seems to be, from a chemical point of view, the convenient means they afford of introducing the due proportion of water, in a suitable form, which must be associated with all airdried and concentrated foods, such as clover, hay, chaff, straw, and cake; this use is quite apart from their own value as containing nutritive materials. A mixture of clover hay, and linseed cake, and of swedes has yielded results decidedly superior, so far as the rapid increase in live weight is concerned, to those from any one kind of fodder in its natural condition. This occurs when due attention is given to ensure in the mixture, not merely a palatable flavour, but also

- The best percentage of water;
- The best nutrient ratio;
- Available forms of flesh-formers;
- Enough fibre, &c., to give solidity to the food.

Many experiments have been made to ascertain how far sheep could be fed on roots alone. Mangolds, swedes, and turnips have been used, but chiefly mangolds, in the Continental trials; and the general conclusion seems to be that not only must you lose a very large proportion of the feeding material in roots when you employ them alone, but that the rate at which animals increase in weight when so fed is excessively slow. Now we are certain that nothing causes so serious a loss in feeding and fattening as the consumption of food during a protracted period, for the mere purpose of sustaining the mechanism of the body, with its heat and muscular activity. The two defects in the chemical composition of these foods are either an excessive proportion of water or of heat-giving nutrients. Potatoes and sugar-beet do not indeed include a larger percentage of water than can be disposed of by the animal economy, but the large excess of starch in the potato, and of sugar in the beet, constantly induce scouring when these foods are given alone—much starch and sugar being voided without having been digested or absorbed. It is of importance to note here that while a moderate proportion of starch and sugar and other soluble carbohydrates is of importance as heat and force-givers, their presence in a food also enables the flesh-formers to be in part stored up in the increase, and in part to be transformed into fat. With the sheep, at all events, starch and sugar appear to have no direct power of producing fat. Now as the increase of a mature animal shows an ever-increasing proportion of fat as the feeding continues, the importance of furnishing it either with ready-formed fat or with a substance capable of yielding it by decomposition in the body becomes evident. That roots alone, even when they contain, like sugar-beets and potatoes, little or no excess of water, cannot supply the sheep with the means of producing fat is evident from all the experiments hitherto made on this point; but the following series of experiments on sheep (59 animals in all) is quite decisive as the utilisation of the albuminoids of their food in the formation of fat:—

Series.	The food daily digested by each sheep continued—		The nutrient ratio was—		The daily increase per head was—
	Flesh-formers.	Carbohydrates.	Car.	Flesh.	
1	4	29	75	10	2
2	5	27½	58	10	3½
3	6	28	47	10	3½
4	7	27	40	10	3½

Now as 70 per cent. of the increase in live weight was fat



which the traces in the foods used were wholly inadequate to furnish, and as the increased production of this fat rose with the increased consumption and increased proportion of the flesh-formers given and digested, the starch and sugar remaining the same, it cannot be disputed that flesh-formers are also fat-formers (where fat is deficient), and that the excess of carbohydrates in roots is a serious defect in their composition. Some of the Rothamsted experiments bring out this fact quite as certainly, but the evidence they furnish is not so obviously decisive. These figures illustrate the poverty of roots in fattening constituents:—

Average weight of sheep.	Kind and weight of food per head per week.	Increase per head per week.
(1) 120lb. ...	Meadow hay, 23lb. ....	0 lb. 8 ozs.
(2) 75 " ...	White turnips, 107lb. ....	0 11 1/2
(3) 113 " ...	Swedes 120lb., oat straw 1/2 b. 1	8
(4) 114 " ...	Linseed cake 8lb., clover chaff 7lb., swedes 106lb. ....	2 12
(5) 110 " ...	1/2 seedcake 7lb., green clover 3	4 1/2

In the fifth series the flesh-formers were highest in quantity and proportion, while the fat formed was greatest. The previous series comes next, with a lower but still high proportion of flesh-formers. That these, and not the ready-formed oil of the cake given must have been a main source of the increase in live weight is apparent, from this consideration—the 8lb. of linseed cake and 7lb. of clover chaff, in series 4, contained just over 1lb. of oil, of which 9 ozs. might be reckoned as storable in the increase. This increase contained 14 ozs. of fat, of which nearly 5 ozs. must be attributed to the flesh-formers in the food. Note, also, that of the dry matter in the different foods it takes 30 to 40 per cent. more to produce an equal increase in live weight when roots are used instead of more nitrogenous food, while the rate of increase is but one-third as rapid. In my 1874 experiment on mangolds I found that scarcely one-fourth of the total nitrogen present existed in the form of actual flesh-forming material; but we may lawfully calculate the remaining three-fourths of this most valuable element as available for manure. Proceeding upon this basis, the nitrogen of every ton of such mangolds as those I analysed is equal as food to 10lb. of flesh-formers, worth 1s. 8d.; and as manure to 5 1/2lb. of ammonia, worth 4s. 6d. But there are two other constituents of these roots which we cannot neglect—namely, the mineral matters and the heat-givers, or carbohydrates. We shall not be far wrong if we put down the mineral matters as amounting to 2 1/2lb. per ton, and as worth 2s.; while the sugar and other heat-givers, amounting to 150lb., will be worth as food 13s. 6d., provided, that is, they can be profitably utilised. Arranging these theoretical values in a tabular form, we have—

#### Value of one ton of mangolds:

	s.	d.	s.	d.
As food—10lb. of flesh-formers .....	12	6		
150lb. of sugar and heat-givers .....	1	8		
Total .....			14	2
As manure—5 1/2lb. of ammonia ...	4	5		
2 1/2lb. ash .....	2	0		
Total .....			6	5
	£1 0 7			

Now in this estimate we have to criticise separately the two items of manurial and nutritive value. Assuming that no part of the phosphates or potash of the ash of our mangolds, and none of the non-albuminoid nitrogen is carried off by the animals, we have still to remember that these manurial elements have been for the most part drawn from the very soil which it is presumed they enrich. Roots, then, when eaten on the land, transfer manurial matters from the soil to its surface, and they change the condition in which that manurial matter is found, but they do not increase the 'capital' of the soil like imported foods. And this is the case even if we assume that there is no loss of available manurial elements either in the body of the animal or after its deposition on the soil. Such a loss of nitrogen, it seems, does actually occur, and may amount to one-sixth of the whole quantity. And now as to the nutritive value of the mangolds. We can buy a hundredweight of linseed cake for, say, 11s. (less now), and this would contain mucilage and oil equal to 60lb. of starch,

with 36lb. of flesh-formers. Put the starch at 1d. and the flesh-formers at 2d. the 1b.; the calculated value becomes 5s. for the former and 6s. for the latter—11s. in all: or wheat calculated in the same way gives us similar values for starch and flesh-formers, if taken at 5s. the bushel of 60lb.; and so do the different kinds of common pulse. Can we, then, admit 14s. 2d. to be the food value of a ton of mangolds as food? I think not, for the following reason. A ton of mangolds contains 150lb. heat-givers, but only 10lb. flesh-formers. Now this proportion, or ratio, is not a suitable one for any animal in any condition, or at any stage of its growth. For sheep and lambs the ratios of heat-givers to flesh-formers should be somewhere near

55 to 10 when	5 to 8 months old.
60 to 10 "	8 to 11 "
70 to 10 "	11 to 15 "
80 to 10 "	15 to 18 "

Thus 70lb. out of each 150lb. of heat-givers in mangolds given to sheep will be unused when these roots are consumed alone, even by animals capable from their age, &c., of making the best use of a food rich in heat-givers. This mode of viewing the matter compels us to modify our estimate of the feeding value of mangolds for sheep, say of one year old, and to deduct 7s. 1d., the value of 85lb. of sugar or starch from the 13s. 2d. previously given. Thus our final figures become, for one ton of mangolds—as food, 7s. 1d.; as manures, 6s. 5d.; total, 13s. 6d. But in the above calculations I have supposed that all the true flesh-formers present in mangolds are carried away in the nitrogenous increase (substance of true flesh) of the animals that consume them. But is this the case? So far from it that Messrs. Lawes and Gilbert in their paper "On the composition of oxen, sheep, and pigs, and of their increase whilst fattening" (1861), say—"Of the nitrogenous compounds consumed by the fattening sheep the average of the estimates shows less than 5 per cent. to be retained in their increase." Where the nutritive ratio is properly adjusted, and the food is adapted in flavor, bulk, and texture, as well as in composition, to the needs of the animal, we may increase the above estimate of 5 per cent. somewhat. Yet, after all, the figure we are dealing with, of 10lb. of flesh-formers in a ton of roots, is so small that whether the deduction be 5 per cent. (half a pound), or 10 per cent. (1 lb.), the difference in our estimate of the money value of the flesh-formers will be but slight. However, it will have to be transferred from the food side of the account to that of the manure. Let us deduct 10 per cent. as actually stored up in the increase, and let us transform the remaining 90 per cent. into its equivalent of ammonia, and regard it as an addition to those manurial matters which we know must be almost wholly voided by the animal. Now 9lb. of flesh-formers are equal to 1 1/2lb. of ammonia, which would be worth 1s. 3d. as manure. Our corrected estimate will now appear to be—

#### Value of one ton of mangolds: s. d. s. d.

As food—65lb. available sugar, &c. ....	5	5		
11lb. flesh-formers retained .....	0	2		
Total food value .....			5	7
As manure—				
9lb. flesh-formers not retained .....	1	8		
Nitrogenous compounds not nutritive ..	4	5		
Mineral matters .....	2	0		
Total manure value .....			7	8
Total value as food and manure .....			13	5

Such a deduction as that which we have made from the feeding value of the mangolds is justified by all the hitherto-tried experiments with sheep fed exclusively on these roots. But is there no way of utilising this excess of heat-givers, and of making them available for the nutrition of the animals? By a most moderate use of some rich nitrogenous food as oilcake, the proportion of heat-givers to flesh-formers may be rectified and the whole of the former made available. And it is by such additions of oilcake or of clover chaff that we are able to bring out the feeding value of mangolds. We must add (and in practice we do add) to the daily ratio of our sheep such an amount of albuminous matter as shall restore the nutritive ratio to that required. Supposing that we select, for the sake of simplicity of illustration, a single article of food rich in flesh-formers for this purpose, we may choose deoctrated cotton cake. It will be found that the proportion of the 1-



'oods required will be 3,940 lb., or 1 ton of mangolds, 100 lb. decorticated cotton cake; or, for every 23½ lb. of roots, 1 lb. of cake. For the nutrient ratio in the cake is 13 to 10, or 100 lb. of cake will contribute 56 lb. heat-givers, and 44 lb. flesh-formers. A proportion affording a marked contrast to that of mangolds, being 13 to 10 instead of 150 to 10. By a suitable admixture of such a material as this cake, with the addition or substitution of clover or of other food practically proved to be suitable for other other reasons to the animals to be fed, we may recover the value of the heat-givers of mangolds to be deducted. Thus the feeding value becomes 13a. 8d. and the manurial value 7a. 8d. I have not taken from the latter sum the 1-5th supposed to be lost, as the data for such calculations are still far from conclusive. The greatest German authority on the rational feeding of farm animals gives the food value of a ton of mangolds as 13a. 10d., a figure identical with my own estimate, though reached by a somewhat different process. He, however, gives the nutrient ratio of these roots as 85 to 10, while other authorities, basing their calculations upon analyses still farther from the truth, give a ratio of 80 or 40 to 10 instead of 150 to 10, or in the most favourable cases yet observed of 110 to 10. I have previously explained why it is that the nutrient ratio hitherto accepted for these roots is so very different from my own, and I may add, from that which is now being generally arrived at by foreign agricultural chemists. But I have not referred to the digestibility of the true flesh-formers present in these roots. We have seen that of 100 parts ingested but 10 or 12 at the most are to be found in the increased live weight of the animal, but much more than this must be digested and assimilated. All the experiments made to decide this point so far as roots are concerned are subject to this error, that the amount of flesh-formers, having been exaggerated by from one-third to three-fourths of their real amount, has led to their being regarded as undigested—the fact being that they were not there! Page after page is devoted by Wolf to explain, or rather to state, the extraordinary lowering influence exerted by mangolds and potatoes upon the digestibility of the flesh-formers in clover, hay, and other fibrous forage plants with which they were associated in various feeding experiments; but the apparent lowering may be at least in part explained in the way just noted. I incline to think that nearly the whole of the true flesh-formers in roots is digestible, and, when the conditions of economical feeding are fulfilled, digested. With very concentrated nitrogenous foods experiments have shown that from 70 to 97 per cent. of the supposed flesh-formers present are digested by oxen and sheep, the figures being:—

97 to 90 per cent	for pulse;
90 to 85 "	for linseed cake;
88 to 78 "	for rape cake;
78 to 74 "	for wheaten bran;
70 to 74 "	for cotton cake.

Now, as I have found that some of the cattle foods here given (especially those last named, do not contain as much albuminoid or flesh-forming matters as that with which they have been credited, here also we have a question which cannot be settled till more accurate analyses are forthcoming, and it would certainly be rash to assert that all the real albuminoids in decorticated cotton cake are even capable of digestion. I ought, perhaps, to have said something about the water in roots, large and small, and its influence upon their chemical composition. The large watery root, especially of mangolds grown in rich soil or with liquid or sewage manure are known to be very aqueous. Sometimes roots of no more than four or five pounds contain 93 per cent. of water, as large a proportion as that in ordinary white turnips of half this weight. But the nitrogen and potash salts of these big roots is often comparatively high, and thus their manurial value is not diminished like their feeding value. But it is important to remember that tons of big roots with 93 per cent. of water in them contain less solid matter in them than 13 tons of smaller roots, of, say, 3 lb. a piece, but having 89 per cent. only of water. That there is more water in mangolds than they are usually credited with may be inferred by looking at tables of recent analyses of these roots. The last published series of these includes twelve varieties, the average percentage of water in which is exactly 90. It would be tedious to discuss with equal fulness the feeding and manurial value of all the

different root crops of the farm; but it will, I hope, be useful to come at least amongst as if I offer a few observations upon turnips, swedes, and potatoes, regarded from the same point of view as that before taken. In so far as swedes and turnips generally contain more water than mangolds, they are clearly less nutritious, weight for weight. Wolf gives these figures as representing the average food value of these two crops per ton:—

	As food.	As manure.
	a. d.	a. d.
Swedes, ratio 75 to 10.....	14 0	
Turnips, ratio 81 to 10 .....	9 8	
My calculations, based on new analyses, give—		
Swedes, ratio 123 to 10 .....	10 6	4 5
Turnips, ratio 100 to 10.....	8 0	3 4

Mr. Lawes' estimate for the manurial value of swedes is 4a. 8d. per ton, of turnips 4a. Potatoes may now be briefly considered. If we assume these tubers to contain on the average 26 per cent. of solid matter, we shall find in this not 3 per cent. flesh-formers, but only about half the quantity, perhaps 1½ per cent., of which ½ per cent. is albumen soluble in water. The starch and heat-givers will probably amount to 20 per cent., and thus the nutrient ratio will become 30 to 1, or, in the form we have previously given to this ratio, 900 parts of heat-givers to 10 of flesh-formers, not the 50 or 60 to 10 which a complete food requires. Wolf gives 100 or 190 to 10 as the ratio in question, basing his results upon old and incorrect analyses. Without repeating the several steps of the calculations, I give the value of a ton of potatoes, regarded as cattle food and as manure:—

	a. d.
As food—165 lb. of available starch and heat-givers .....	13 7
24 lb. of flesh-formers retained .....	0 6
As manure—30 lb. flesh-formers not retained ...	2 8
Nitrogenous compounds not nutritive .....	2 9
Mineral matter .....	2 2
	21 1 7

But if we utilize the excess of heat given by due admixture with a more nitrogenous food as pea-meal and oilcake then we must add 21 3a. 9d., the value of 285 lb. of starch, thus making a final total of 23 5a. 4d. for the ton of potatoes. Wolf assigns to these tubers the nutrient ratio 103 to 10, and gives them a money value as food of about 28a. per ton. The great difference between this theoretical food value and my own estimate (about 38a.) is chiefly due to the low value assigned to starch in Wolf's calculations. And his figure would have come out lower still had he not reckoned all the nitrogen in these tubers as existing in the form of flesh-formers. In order to furnish a check upon the accuracy of my new method of analysing roots, I compared the results of three other similar processes which suggested themselves to me in 1873-4, but which I abandoned as inferior to my carbolic method, as I term it. A sample of potatoes of the present season gave the following percentages:—

Flesh-formers.	
1. By ordinary method.....	1·818 per cent.
2. By carbolic method.....	1·038 "
3. By mercuric chloride method...	1·307 "
4. By lead acetate method .....	1·180 "
5. By tannic acid method.....	1·196 "

The mean of the four last numbers gives 1·179 per cent. of flesh-formers in these fresh potato tubers, instead of the 1·818 per cent. of the ordinary method. Roughly speaking, they contained two-thirds of the amount with which they would have been credited. This is not the place to discuss the relative merits of different chemical processes, but I give the above numbers partly to show you that this question I have brought before you to-day is being worked out thoroughly, and partly because these numbers confirm in a measure my previous statements. Indeed, I trust that I have shown that agricultural chemists are now most anxious to bring their teaching into harmony with the complex facts of nature, and to profit by the experience of farming practice. In conclusion, I have again to apologise for my very imperfect and partial treatment of a very wide subject, and to express the hope that whatever the failings of my paper are, I shall at least start an interesting and valuable discussion. (Loud applause).

## CATTLE OF THE VARIOUS BREEDS AS BEEF PRODUCERS.

Mr. G. T. Turner has contributed to the *Live Stock Journal*, of Chicago, a letter, occupying nearly two pages of that paper, of which we give the principal portions:—Mr. Pliey Nichols quotes a paragraph from the *London Field* in which it is stated that the Scotch beasts, which nineteen times out of twenty "top the market," are "cross-bred beasts, with just sufficient of the native blood retained among the Shorthorns to preserve a polled head, and black or iron-grey; i.e., good as the Scotch race are, they do not reach their climax till the Treewater touches them; and from this he argues that "nineteen times out of twenty, grade Shorthorns top the London market," and asks how often the Hereford could get in there. In reply to this, I must first demur entirely to the dictum of the *Field*, which I take to imply that these Scotch crosses are partly-bred Shorthorns, having more or less Scotch blood in their veins. I do not hesitate to state that such is not the case. The animals in question are usually crosses—not mixed, or mongrel-bred beasts. The sire is usually a pure-bred Shorthorn and the dam a Scot; at other times, the sire is Shorthorn and the dam a cross-bred Scot. Evidence of anything like the amount of Shorthorn blood indicated by the *Field*, I have very seldom seen in these animals in the metropolitan market. Certainly, the term "grade Shorthorns," used by Mr. Nichols, is not at all applicable to them, if I am at liberty to judge of the "grade Shorthorns" we import from America. The first cross between two distinct breeds has been proved by practice to be the best, and breeders of cross-bred beasts and sheep solely for the butcher do not usually go beyond a second cross on the dam's side. To breed from a cross-bred sire would, of course, be to produce nothing better than mongrels.

For evenness, thickness, and quality of flesh, together with size, I do not think anything which comes into the London market can excel a first cross between the Shorthorn and Polled Scot; and these, together with similarly bred cattle from Scotch dams which have one or two crosses in their blood, are the best "crosses" which are exhibited at Islington and Birmingham fat stock shows. For example, the awards at Islington, December, 1877, for "cross or mixed-bred cattle," were as below:

Steers not exceeding 3 years old.	
Cap £40 and	} Shorthorn and a Polled Scotch, second cross.
1st prize	
2nd "	
3rd "	} Shorthorn and Galloway, first cross.
1st prize	
2nd "	
3rd "	} Shorthorn and Polled Scotch, second cross.
1st prize	
2nd "	
3rd "	} Ozen above 3 years old.
1st prize	
2nd "	
3rd "	} Shorthorn and Aberdeen, first cross.
1st prize	
2nd "	
3rd "	} Shorthorn and Scotch Polled, remote cross.
1st prize	
2nd "	
3rd "	} Shorthorn and Aberdeen, second cross.
1st prize	
2nd "	
3rd "	

With a very few exceptions, the entries of cross-bred cattle both at Islington and Birmingham, were from Shorthorn sires and polled Scotch dams. I give this detail because it is important that it should be clearly seen and understood that partly-bred, mongrel-bred, or—if I may be allowed to use the American term—"grade" Shorthorns, do not top the English market. Again: the Shorthorns are never, that I am aware of, quoted at equal rates to the Scots, Herefords, and Devons, in the London market returns; and the difference in the value per pound is greater than many suppose. For example, the quotation for Monday's trade, October 21st, was as follows, in the *Mark Lane Express*:—"The top price for the best Scots was 5s. 10d. per 8lb.; many good Shorthorns and Americans did not make more than 5s. to 5s. 4d. per 8lb." The relative value of Shorthorns to other breeds is expressed in the same ratio in every market return of which I have any knowledge.

In reply to Mr. Nichols' query as to how often the Hereford could get to the top of the English market, I may say, with correctness, that he is there during the months of July, August, September, and October, those being the months he is in season. The Hereford is highly esteemed in the London market as a grass beast, and in that character he stands in the front rank for a time, though he does not offer particularly well. No beef is better eating than that of the Hereford when fully ripe, off the grass; he is full of flesh in the most valuable parts, and readily "tops the market." Speaking of fat

bullocks as they appear in the London market, the best of all will be the West Highlander; the thickness and quality of his carcass when split down, together with the weight of it in proportion to the height and apparent size of the living animal, will astonish the looker-on who is not in the habit of seeing these animals hung up. He grows slowly on his native hills, and does not usually come to London until at least four years old, and his beef is of a class which no other breed supplies now a-days. The offals are valuable, and he is worth, generally speaking, from 2d. to 4d. per stone of 8lb. more than any other beast sold on the London stones. The polled Scots are all the year-round beasts, are well fed and full of prime flesh on prime parts. They usually top the market, together with the Scots' crosses, of which I have already spoken, which are often better than the Scots themselves; and for thick cutting, and value for money at all times, they certainly bear the palm. The little Devon suits some trades, and when rice makes full prices. Some larger and more generally-useful bullocks come from Sussex, and are always welcome. Welsh rants are very excellent bullocks, as a rule. Pure-bred Shorthorns are comparatively rare; but a large number of well-bred Shorthorns constantly come to London from all parts of England, and especially from Ireland. Some of these find their way to the front, and sell for top figures, but the great bulk of them are second to third-rate in the scale of prices. Independent of the London market, they form the staple beef supply of the country, and in describing them the American word "grade" comes very handy. They show every proportion and combination of Shorthorn blood, and vary greatly in quality. The generality of them are coarse, uneven, and have less prime in proportion to their weight than the breeds mentioned above; they are heavy in the shins, thick in the clod, and deep in brisket—all of which means weight that sells for little; they are fat behind their shoulders, and narrow in the chine, and plain in the rounds and twist, which reduces the weight of roasting meat. That is why they do not top the market. The rank and file of the English "grade" Shorthorns are not very much better, except in being rather smaller and finer than the American "grade" Shorthorns which are imported; and neither of them are so good as the Scotch crosses, with which they should not be confounded. So much for the facts; now for arguments based on them.

I think no one who has watched the progress of the Shorthorn cattle during the last twenty years can have the least doubt as to the great, I may even say incalculable value of the breed. To judge from the American beef, alive and dead, which finds its way here, it will be only fair to suppose that the improvement in American cattle during that time must be almost entirely due to its agency. The leavening influence of this blood has spread over the greater part of an immense continent, and clothed its semi-wild cattle with marketable beef. It has developed largely in Australia, and improved the herds of Europe. It is very marked in its influence on every inferior and mongrel-bred kind of stock with which it has been tried; it has raised the general standard of the bulk of the beef and milk-producing cattle of the United Kingdom; in conjunction with at least one other pure breed of cattle, it is capable of producing something better than itself, and better than either; and yet it does not "top the market," when the market is for beef! I am surprised that such should be allowed to remain an undisputable fact—for such I take it to be. I hold that the great value of Shorthorn blood consists in its marvellous adaptability to almost every condition under which beef and milk are usually produced, and in that alone; admitting, of course, a high general standard of excellence. The Hereford will make a better butcher's animal—I think there is no doubt about that—under the conditions of soil and climate obtaining in the West of England; but from my own experience, and that of many others, I am inclined to think Herefords could not contend with Shorthorns as stall beasts on a mixed husbandry farm; and certainly they cannot compete with them as milkers. If the method of rearing them were altered, I think the character of the animals would alter too. The West Highlander must have his native hills, on which to grow at leisure. The Polled Scot appears to require his northern climate and the excellent roots—swedes and turnips—grown therein; for when he comes south, he too often merits the sobriquet of "pensioner." The Devon is essentially an upland beast, and small; when he is put on the low lands, he gains size and loses character. The Sussex is a good beef-maker, but not, I believe, a good dairy animal. But the

Shorthorn can make beef with the Soot or Hereford, or make milk with the Ayrshire or Channal-Islander, and live side-by-side with either of them.

Well might Youatt say that "it is the combination of perfections which has conferred, and will perpetuate, the superiority of this breed of cattle." But that was forty-four years ago; if Youatt were alive now, it is reasonable to suppose that he would be surprised to find that they do not top the metropolitan market. Taking into consideration the improvement in the quality and consuming value, together with aptitude to fatten—early maturity—which has taken place in some other breeds during the last twenty years, it would appear strange that with unequalled adaptability for vantage-ground, and all the assistance which care, attention, and unlimited capital could give to a breed already possessing a "combination of perfections," the Shorthorns should not now be the best butcher's beasts in the world. But they are not. And the cause lies but a little below the surface. Shorthorn breeding in England has fallen, for the most part, into the hands of gentlemen who have made a hobby, a "fancy," or "fashion" of it; and who treat their hobby precisely on the same lines as the tulip hobby, or the old-china hobby, or the antique bookbinding hobby, has been treated; that is to say, their object is purely fanciful; certain strains of blood are pronounced "fashionable," and straightway the ideal is fixed on producing families possessing this blood in an intensified form by breeding its individuals *in ferre*. The direct result of this is loss of constitution, loss of fecundity, and the multiplication of Shorthorn types. The breeders of other pure-bred varieties of cattle, such as Herefords, Scots, &c., have bred "in-and-in" to an extent requisite to establish breed-type and character, and to eliminate alien blood, but never to the extent which has been practised with Shorthorns. Their object has been the production of the best possible butcher's animal, and their success during the past twenty years has been very marked. If Shorthorn breeders—I speak solely of "fanciers" and "fashion breeders"—have had a similar object in view, they certainly have not attained it. Those who are in the habit of attending our great breeding-stock shows, such as the Royal, the Bath and West of England, and some of the more important county meetings, will see animals of the several "fancy" or fashionable strains of Shorthorn blood, which, so far as their frames and their character are concerned, are the veriest weeds, with nothing whatever to recommend them to the bullock breeder. But the idea of bullock breeding is beside the question, it will be urged; their blood is priceless, and they are to get bulls and heifers for sale as blood stock, for stud purposes again; the bullock is a very remote contingency. Well, be it so; but however remote the contingency may be, it must come—the end of things bovine is beef—and there is no avoiding it. If, therefore, these blue-blooded stud-animals which are to get bulls to get other bulls, to get yet again other bulls—I care not how many removes areo bargained for—have not good frames to transmit, wherein consists their fabulous value? We are told daily that it is to transmit the qualities, the "combination of perfections" of the breed, which lie latent in their blood, although their powers have been sacrificed in the process of concentration and refinement. But with results before me, I simply do not believe it. When herds which have been bred for mere excellence come to the hammer, although pure-bred beyond all question, they make prices which are about double the value of ordinary stock, and realise an average of from £40 to £50. Such animals go into rent-paying stock-breeders' hands, and do an immense amount of good to the stock of the country. But when some "fashionable" herd is under the hammer, thousands sterling are realised for animals bred on fancy lines, though not possessing one feature of recommendation to an outsider beyond those at £40 apiece; in fact, as animals, they are often not so good. If the stock of this country; or that of any other country, is to be benefited by this "fashion" breeding, I fail entirely to see in what way. I believe a vast amount of injury is being done by these fanciers, because they poison the stream at its fountain-head. They set a fashion, which others must follow to some extent, or fail to obtain good prices. With the material they have had to work with, they might by this time have made the Shorthorn a more perfect butcher's animal than any in the world, if they had made that their object. But they have not; or, as I have already said, if they have, they have failed. Your cor-

respondent, "T. C. J." makes some remarks on this subject with which I entirely agree, and with him, I "hope for a return to the old common-sense practice of breeding with reference to profitable and useful qualities," and when that time shall come, I have no doubt the Shorthorn will be equal to any other breed in respect of his carcass, and superior to all in respect of his adaptability to varied conditions of existence.

There is yet an important consideration to be noted. Shorthorns in America appear to be used chiefly as meat-producers; whereas in England they are chiefly used as carriers of meat and milk producers. If they were raised into the front rank as meat producers, they would probably be no better milkers than other breeds which are raised solely for beef; and thus lose, to some extent their cosmopolitan character, though possibly not their special adaptability to systems of mixed husbandry—in other words, to being reared on arable farms. With profound respect for Youatt, I do not believe in a combination of perfections, though I willingly award them a combination of excellencies. Beef and milk appear to be as antagonistic as mutton and wool, and practice has not yet demonstrated that, in either case, both can be combined in one breed to anything approaching perfection. A perfection of combination may be attained, but not a perfection of both products.

## LAND DRAINING.

The following is a report of Mr. Mansfield's paper on "Land Draining," read at a meeting of the Ixworth Farmers' Club:—

In meeting together again I am sorry I cannot congratulate you upon a return of more prosperous times, although I am thankful to say we have been more favoured than having finer weather than our neighbours a few miles distant, so that most of our barley will command a good price; were it not so, this year would rank with its immediate predecessors as being amongst the worst for many years past. You are aware the Committee has circulated a schedule of prizes to be competed for and awarded at our autumn show of roots, &c., which will be held later than usual, partly in consequence of the backwardness of the root crop, and partly that we might have a moonlight night to go home. You will have noticed there is one prize not offered this year, viz., for farmers' sons' ploughing. Our President would have much pleasure in giving it if there could be found a fair amount of competition; he is making a stay in Cornwall, or he would have been with us to-night. He never misses an opportunity of helping the Ixworth Farmers' Club; it is mainly through his influence and example that it has risen to its present position, and with the assistance of our Vice-President and neighbouring landowners, and many of you gentlemen who are the rank and file, a most important part of our army, it must still continue to increase in influence and usefulness. It will soon be incumbent upon us to revise our rules. We have outgrown the scope of most of them, but there is one we have not acted up to, which provides that prizes shall be given annually for land draining, for which the Club has never given one; but last year Mr. Castledine gave a prize, and I think I am right in saying that a friend has offered to give £1 for a prize for land draining this year. It is through a disappointment that I have undertaken to introduce a subject to-night. Our friend, Mr. Castledine, had promised to read a paper upon the "Storage of Water," but through the pressure of business at this season he is compelled to defer it until December. Rather than let the month pass without a meeting I am here to bring to your notice the very common-place subject of "Land Draining." Many will think there is nothing they can learn upon that, and they are right; but I find it better sometimes to overhaul our knowledge of very familiar subjects, and not to allow it to remain inactive. I have noticed that during the last few years very little land draining has been done. I look upon it as the foundation of the successful and profitable cultivation of all land that requires it. Upon wet land weeds will grow well; corn will rot. Manuring is but of little use. I shall not occupy your time by dwelling upon how land was drained many years ago, but speak briefly upon the different methods as practised now in our locality, viz., steam mole ploughing, and draining by manual labour. Where there is a

good fall for the water I have found the steam mole plough do its work very well. Thirteen years ago I had a field steam mole poughed every three years. In doing it all the surface soil between the drains was moved. It was a very stony field, and I believe the drains work well now. My usual practice has been to have these steam drains a rod apart, and thirty inches deep. Great care should be taken to keep the plough in an upright position; otherwise the bottom of the drain is uneven, and the cost probably wasted. Some I mole ploughed ten years ago. I drained with the spade two years ago, when I could as easily find where the blade of the plough had cut as if it had been done only one month. The cost of steam mole ploughing is about 50s. per acre, exclusive of cost of horses to draw the ploughs about. It is not suitable upon moderately flat land, or land with many sand galls in it. It is more or less an inefficient substitute for good pipe draining. The proper time for steam mole ploughing is when the land is dry, as there is a difficulty in keeping the main drains done close up to the plough. If they are not, in a wet time they are rendered useless at once. I look upon draining by spade as the best and most economical method. All things considered, I prefer to drain upon an unbroken wheat stubble. It is easier to walk upon, and it ploughs much better after than before being drained. The first thing is to find the best soil for the water. It is almost impossible to do this in many fields without a level, but with a little practice I have found the common bricklayer's level answers every purpose. There are levels made expressly for the purpose, but these are more or less expensive. Having ascertained the best fall, I proceed to draw the drains, ploughing six furrows, or, as it is called here, five furrows and a brow, by which means the drain is drawn ten inches deep. The distance from drain to drain must vary according to the soil and the depths of drains, but where wood, furze, or straw is used for filling up, the drains should not be more than six yards apart, or less than thirty inches deep. If pipes are used, the drains should not be more than nine yards apart, or less than forty inches deep, but upon this great difference of opinion prevails. We are indebted to some gentlemen for what I may call experimental and theoretical farming; where they are unsuccessful—and they frequently are—we need not follow their example. I have profited by the experience of some who have departed from the old-fashioned and beaten course of land draining. I have seen draining done not more than twenty inches from the surface, and filled up with straw. I thought the money was not well spent. I have also seen it done (upon a very stiff blue clay) four feet deep, under the direction of a Land Improvement Company. I thought it would have been more effectual twelve inches nearer the surface; had it been mine it would have been so—but I am bound to add that the tenant of the land, some years afterwards, told me he was quite content to pay the increased rent which covered the cost of drainage. I have seen deep pipe draining exceedingly well done at Thornham, where they did not go upon such a hard and fast line as the Land Improvement Company did; and I also remember seeing some very excellent draining at Drakstone, where I think the drains were generally nine yards apart, and forty inches deep. In the last three instances pipes were used. Having drawn the drain ten inches deep with the plough, a very good drain may be made thirty-two inches deep by taking out two spits of earth. The cost, exclusive of material for filling up and drawing drains, is about 35s. per acre. Such draining, if properly done, will stand well for about twelve years. I prefer wood or furze for filling up drains to straw, as either of the former are more durable and cheaper than the latter. The methods of which I have spoken are but makeshifts in comparison with good pipe drainage. My own practice is to have the drains drawn nine yards apart, ten inches deep; I then go thirty inches, three spits with the spade. At first I have a difficulty to get the proper depth; I always have a long spade in the field, which I lay across the drain, the ends of the spade resting on the unploughed land. I require forty inches from the underside of that spade. I always have a man whose business it is to lay in the pipes and are the work is properly done. He is not allowed to pass any that is not the proper depth, or improperly done. I find a cart of water in the field very useful for the levelling when the draining is going on. When the drain passes out of the hands of the man who digs it the player puts in his pipes and covers them with a little of the surface soil, other men follow and spread all the soil that

has been taken out of the drain. The drain is afterwards ploughed in, long whippetrees being used. The cost of draining in this way for manual labour is from 40s. to 50s. per acre, the pipes about two guineas. Such draining is very durable, and will last for many years. The clay-spreading costs an additional five shillings an acre, making the cost of thorough draining and laying £4 12s. an acre, exclusive of drawing drains and carting pipes. I prefer having very few eyes and using large pipes for the main drains, the size of the pipe to be according to the extent of land drained by it. The question arises, Is a tenant justified in making such an outlay? I should say certainly not, unless he is protected by something beyond the custom of the country. Such draining as I have described should be deemed an unexhausted improvement for 20 years, and the tenant should be entitled to compensation in respect of it during that time, as provided in the Agricultural Holdings Act. And again I should say certainly not, as it is a work that should be paid for by the landlord, done under proper supervision, and the tenant should pay a reasonable amount of interest upon the outlay; or the landlord should find pipes, charging the tenant interest upon the outlay, and the tenant find labour, the unexhausted value thereof being spread over a much longer period than usually allowed by the custom of the country. A landlord might not feel justified in making such an outlay; such an one could go to a Land Improvement Company, who would see the work was properly executed, and the cost would be paid off within a certain number of years, as also provided in the Agricultural Holdings Act; or a landlord on paying to the tenant the amount of compensation due to him under this Act may obtain from the County Court a charge on the holding in respect thereof (Section 42). I can see no reason why draining such as I have last described, and well done, should not be as efficacious at the end of 50 years as at the beginning. It is more economical, as it requires to be done but once, while draining filled up with wood would require to be done four times during the same period, and there is not much difference in the cost for manual labour whatever material is used for filling up. One reason why more draining is not done is, that farmers are frightened at the cost, and they have not sufficient security for the unexhausted improvement, although the cost of shallow draining is not greater than the cost of manuring with farmyard manure. In the latter case the return is immediate and almost complete, but in the former the return is more gradual, and remains unexhausted for a longer time. To my mind, draining thirty inches deep, and well done, filled in with wood, should be deemed an unexhausted improvement for not less than six years, and that an outgoing tenant might fairly be recompensed upon that scale, deducting one-sixth of the cost for each year the work has been completed. Another reason is, in some places it has been difficult to get a sufficient supply of good drainers, although I have never had any trouble in getting any number I wanted, and very good land drainers too, from this and the adjoining parishes. I find labourers are most plentiful between the times of wheat sowing and wheat hoeing. Two years ago I had between forty and fifty scores of pipe draining done, and I gave no more for it than I did eleven years ago. Last year I saw more labourers standing about the streets of Exworth than I have seen for many years, and I think most likely there will be more still this year. In conclusion, I lay particular stress, whatever methods are pursued, on doing land draining thoroughly. I have seen fields where part has been laid dry, the water has been taken from one part of the field to another, and not carried off altogether, leaving part of the field wetter than it was before anything was done. Where draining is requisite nothing is so wasteful or unprofitable as to neglect it; but where it is requisite and done well there is no farming operation so profitable.

An interesting discussion followed, in which there was a general expression of opinion that a depth of thirty inches was sufficient on heavy land.

**A HANDY YOUNG WOMAN.**—A young lady of Richland, S. C., exhibited at a fair a few days ago a suit of clothes of her own make. She shared the wool, spun the yarn, wove and dyed the cloth, cut and fitted the clothes to fit her brother, and sewed them (with a needle—not with a base, mechanic sewing machine), making as handsome an outfit as the back of man could desire.—*Ontario Mail.*

## THE ROYAL AGRICULTURAL COLLEGE CIRENCESTER.

The Rev. John Constable, M.A., Principal of the Agricultural College at Cirencester, read a paper at the Social Science gathering at Cheltenham, from which the following are extracts:—

"The college founded 33 years ago under a Royal Charter, originated in a desire on the part of farmers and others interested in agriculture to improve the general education of the sons of tenant farmers. The college fees were very low, to meet the necessities of the class for which it was designed. The system of education was to be as general as possible, with the addition of sound teaching in the science on which agriculture depend, and daily observation of the work on an efficiently managed farm. The theory of this was good, else the result must have been satisfactory had the human and moral necessary in such work been all that theory desired. It must be obvious on reflection that the difficulties would be found, first, in securing the services of an efficient farm manager, and then in the proper control of the heterogeneous uneducated mass that would be brought together at the outset of such an original undertaking.

"It seems to be the generally-received opinion among farmers that no one is likely to be a successful cultivator of the soil who has not been accustomed to the work of a farm from his very youth; and no doubt, whether this be exclusively so or not, there is very little question that the sooner all youths work at their future trade the more skillful they are likely to be as men. It was this ingrained notion in the agricultural mind which made the farmers of England look favourably on the Cirencester scheme at the outset, because it seemed to promise the progress of a good general and scientific education without the divorce from the agricultural life pure and simple. Nor do I hesitate to say, after 30 years experience that if the ideal could be practically carried out, the result would be all that could be desired.

"A few years ago some of the chief men in Gloucestershire—Lord Fitzhardinge, Colonel Kingscote, Sir John Rolt, and Mr. Edward Holland—organized a scheme and raised a fund to send annually two students to Cirencester College free, or nearly so, of expense. This opportunity was offered to the Farmers' Club at Kingscote, and, although at first accepted, was ultimately declined on the ground that no collegiate training, however sound and good, could compensate the youth and the father for a two years' divorce from the practical work of the farm at a time of life when the mind is most receptive.

"Without recapitulating in detail the many steps and alterations which have been made in the progress of Cirencester College from its institution to now, it is necessary to say that from difficulties of management and of funds the effort to add the general class for which it was instituted has been abandoned; the fees have been raised so as to lift the college out of the reach of small and middle-class farmers, and to leave it for the use only of the wealthy agriculturists, wealthy land agents, professional men, and landowners.

"But this has been forced on the managers by circumstances. It offered the only chance of meeting a large pecuniary liability. When that liability is gone in the course of years, and the college reverts to the original shareholders, it is possible that the experience of 40 years and the progress in the general intelligence of the country may enable them to try once more the original experiment.

"The object, therefore, of the education at Cirencester is somewhat changed. There is no effort made to carry on general education, the assumption being that those who join have had the average amount of mental training as furnished by the good schools of the country.

"The course is a scientific one, consisting of teaching in chemistry, botany, geology, veterinary surgery, drawing, mensuration, surveying, mechanics, physics, book-keeping, and agricultural law, the whole being taught with a direct reference to the requirements of an agriculturist.

"The effort to combine this teaching with systematic instruction in agriculture is still continued; a very complete course of lectures on agriculture in all its phases is delivered annually, and by the aid of a well-managed 500 acre farm the students have the opportunity of watching all practical agricultural operations and of becoming acquainted with the

management of stock of every kind. On the college farm may be seen excellent horses, sheep, and pigs. If the assumption on which we commenced this paper be a correct one, it follows that our course is most successful when it is brought to bear upon youths who have been brought up on farms, and that, although much sound and useful knowledge may be acquired by such as come to us without any previous connection with the soil, it is to be expected that, except in a few rare cases, the efforts of such men to become good farmers, with or without a subsequent training of years on a farm, are likely to prove abortive.

"To farm with success a man must not only know how and why to do things, he must be able to do them; and although education may help to develop the power to do, it is generally believed that experience and the training of early life are more effective. Given young men adapted to the trade and reared among its details, the education of Cirencester is excellent.

"For men whose future life, although much in contact with agricultural matters, such as land agents or owners of property, will not be burdened with the direct management of land, the course of instruction is well suited. An intruding land agent can there learn all the branches of his profession; so that, in a very short time, under the instruction of an agent really engaged in business, he may enter on his profession with an excellent chance of success. For those youths destined for colonial life, it is manifest that all that can be said of the instruction is that it is the best which this country offers for their peculiar requirements. In general, a colonist, as every other member of the country, cannot but be benefited by the possession of accurate and extensive scientific knowledge, but how far it is essential to his prosperity no general statement can be made, as each colony has its special requirements.

"The results as yet achieved, first, as regards farmers, pure and simple, are encouraging, although small. Secondly, as regards agents, many creditable gentlemen who have been educated at Cirencester may be found managing many of the largest and most important estates in the country, and landowners as a body will, year by year, owe a larger debt of gratitude to those disinterested and noble men who send Cirencester College some years ago from ending its short career. As time rolls on, the influence of agents educated at Cirencester must be more and more extensive and productive of the best possible results to the landed interest. As regards colonists, the records are too scanty to admit of conclusions worthy of note. It is manifest that it would be preposterous either to expect much or to attribute much to one year's residence here of a youth who is only in too many cases yearning for freedom and anxious to get away from all restraint and instruction, for it should ever be remembered that the youths who choose colonisation in general do so through failure at school, from a dislike of work, and from a belief that emigration affords a chance of competency without the necessity of labour.

"The education at Cirencester costs from £126 to £183 for in-students or £50 for an out-student; the course is one of two years. The system is, in general, two lectures weekly on each subject, and frequent practical classes in the laboratory and on the farm. The instruction on an average is about 16 hours a week for each student, with an examination by printed paper every Saturday. The college is empowered to grant a diploma. The average number in a year is six. Since its foundation 200 diplomas have been awarded.

"I may say, in conclusion, that knowing the vast importance of judgment in selecting stock, in fixing prices of grain and all produce, the education of the eye by practical work of every description is kept prominently before the teachers. On the college premises there is an excellent laboratory, museum, botanic gardens, veterinary hospital, forge, carpenter's shop, and lath room; these, combined with the daily sight of excellent cattle, horses, sheep, and pigs, should help to train the eye to recognize good form and quality."

A YOUNG English clergyman in a country parish thus reveals some of the secrets of the clerical prison-house:—"Oh, there are four of us whose churches are neighbours, and we have a whist-party every week, and the loser writes the Sunday sermon for the party."

## "OUR HANDICAPPED NATION."

Mr. William Talbot writes to the *Daily News*:—"In all parts of the country there is being felt the pressure of hard times. Yet there appears to be very inadequate attention to one of the main causes—namely, the exceeding great degree in which our nation is "handicapped" in its commercial race and competition with other countries. If your readers will refer to a little Blue-book annually published, entitled the "Statistical Abstract of the United Kingdom," they will find, to the astonishment of many of them, that the weight of our "handicap" is about 130 millions sterling per annum. That is to say, about 85 millions for Imperial taxation (army, navy, national debt, pensions, civil list, &c.), and 45 millions for local taxation (local boards, highways, police, education, poor rates, &c.). What nation can successfully "run" under this tremendous burden? Its increase as of late years, or even its continuance as at present, must gradually inscribe on the banner the ominous word "Ichabod." Under it even Great Britain must fall behind in the race of nations, unless her people and statesmen, but primarily the former, devise effectual means for reducing this huge weight. And how insignificant, to us, are the affairs of Turks, Afghans, Russians, and "hoc genus omne" in comparison with this vast home interest. The population of this kingdom being 33 millions, this weight of 130 millions sterling amounts to £4 for every man, woman, and child, or £30 per family of five throughout the country. This is an unimportant sum for the upper and middle classes, but, as an entire national average, £30 per home is a tremendous annual burden. And how much of the nation's wealth does it consume? First, the Imperial taxation absorbs an amount equal to all the following—viz., the total imports, so far as they are retained for home consumption, of wheat, £34,000,000 sterling; barley, £5,000,000; Indian corn, £10,000,000; rice, £3,000,000; sugar, £26,000,000; coffee, £3,000,000; and raisins, £1,000,000. The whole of these products of primary need, as imported and retained for the people of the United Kingdom, amount, in value, to £81,000,000. But our present Imperial expenditure actually exceeds all this! Add to this our local taxation, which exactly equals the combined sum of our large import of wool (£15,000,000 for home use) and the net profits on all the English, Scotch, Irish, and Welsh railways (£29,000,000 per annum), making £44,000,000, besides the Imperial taxation. How can our manufacturers, merchants, farmers, working men pay, directly or indirectly such enormous sums, and at the same time compete successfully with nations like the United States, which are comparatively free from similar expenditure? The real remedy is neither for the manufacturer to lessen production, nor for the working man to ask less wages, but for all to combine in compelling legislators of both parties (for both are concerned) to find means of cutting down, this huge imposition. It will bear cutting down, for much of it is for extravagant and worse than useless war expenditure. It is the interest of certain powerful classes to set the millions gaping eastward and expending large resources and money on mere outlandish matters. But it is high time to look at home. All other political interests are inferior in importance to this great question. It should be the question at the next general election, and should be taken up in a patriotic spirit by men of all parties. But unless the constituencies enter upon it in earnest and act resolutely upon it at every election, they may be certain that their legislators will help them in the matter as little as heretofore. Yet it is as certain that if the nation, as a body, looks into the subject it will be impressed with its magnitude and importance and will take steps towards effectual relief."

## FRIENDLY SOCIETIES & POOR RELIEF

The following circular has been issued by the Guardians of the St. Albans Union and sent to other Boards of Guardians:—

GENTLEMEN,—Poor Law Guardians have two weapons with which to prevent property being rendered valueless, and from being entirely consumed by the recipients of relief. One of these weapons is a power to insist that relief shall not be administered except to persons in a state of destitution; the other is a power to insist that relief shall not be administered otherwise than inside the workhouse, unless otherwise ordered by the Guardians.

Mr. Mellor, M.P., has introduced a bill into Parliament to amend the "Poor Law Amendment Act, 1876." The effect of the bill, should it become law, will be to blunt, if not to destroy, these two weapons, so far as they may at any time be applicable to married members of Friendly Societies being sick, and applying for relief.

Sir Henry James, M.P., has recently fully explained the matter. In a speech at Tancott in October last, he said:—"He (Sir H. James) fully admitted the general principle that a man who had property of his own ought not to be supported at the expense of others. The injustice of such a state of things was too apparent to need any demonstration; and if, therefore, Mr. Mellor's bill had proposed that single men, who had only themselves to support, should be supported from the rates, and yet retain the sum payable to them from a friendly society, it would, in his opinion, have been a very unjust and objectionable measure."

With regard to married men, Sir H. James takes a different view. He says:—"The married man who subscribed to a friendly society, did so with the very object that in case of his own illness some provision might be found for his wife and children, so that they might not be dependent upon parochial relief, even if he should become so himself."

We submit that the proper place for a married member of a friendly society being sick, and consequently entitled to sick pay, is at home with his wife, and that the resources of the two are legally applicable to his support; and we consider that, in the event of any application being made for relief to the Guardians, the same rule of law should be applied as would be applicable to persons who are not members of friendly societies.

The representatives of the Friendly Societies state that they number from four to five million members; that they have an annual income of £3,000,000, also a subscribed capital of £15,000,000; nevertheless they are seeking Parliamentary powers to compel their fellow ratepayers to support their married members incapacitated by sickness, the sick pay being devoted to the support of the member's wife and family. (See Note.)

Your experience as administrators of relief we think will have convinced you how necessary it is that the rule that destitution should be the only qualification for relief should be rigidly maintained; also that the power—if thought advisable—of imposing the restraint of the workhouse should not be taken away from the hands of the Guardians.

We therefore trust that you will join with us in endeavouring to prevent any alteration of the law in favour of the Friendly Societies.

The St. Albans Board of Guardians has decided to send a Petition to Parliament with this object.

The Petition is as follows:—

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled:—

The Humble Petition of the Board of Guardians of the St. Albans Poor Law Union, sheweth,—That your Petitioners, believing that the principle of the English Poor Law, that no person has a claim to relief from the rates except in cases of actual destitution, is sound, and should be strictly and impartially followed in the administration of relief, consider that property of every description belonging to a recipient of relief should vest in, and be receivable only by, the authority which may have been required to advance relief.

Your Petitioners consider that the interest of a member in a benefit society should not be by Legislation made an exception to this rule.

Your Petitioners therefore pray your Honourable House not to repeal the 23rd section of the "Divided Parishes and Poor Law Amendment Act, 1876," but to bear in mind the safeguard against undue severity contained in the section, leaving it discretionary for Justices in Petty Sessions to order payment.

Signed on behalf of the Board of Guardians,  
W. HAMMOND SOLLY, Chairman.

NOTE.—Sir H. James says:—"A married man became ill, and received parochial in-door relief, but his wife and children by means of his sick pay were supported, and his home remained intact, and received him when he was restored to health and ability to work, and he made a fresh start at once."

## CAPITAL REQUIRED IN AGRICULTURE.

At a meeting of the Boroughbridge Agricultural Society, Mr. T. S. MASON, Fountainshall, read a paper "On the Capital Required in Agriculture." He said he had had in mind a mixed farm in the neighbourhood of 300 acres, in fair condition—two-thirds arable and one-third grass, rented at 35s. per acre. Such a farm he calculated would require a capital of from £12 to £17 per acre. The half-yearly rent and rates he estimated at £1 ls. per acre; valuation as tenant-right, 18s.; machinery and implements, 80s.; horses, £1 5s.; stock, £5; cake and artificial manure, £1 5s.; labour, £1 5s.; furniture and housekeeping, £1 10s.; repairs, 3s.; and 3s. per acre in addition made up £14 per acre. With regard to the valuation as tenant-right, the sum he had set down was low, for it would undergo considerable change, according to the manner in which a farm had been carried on, and according to the nature of the holding. Few but those who had had it to do could estimate the cost of putting a farm in good condition which had been allowed to run back. Time and capital had to be expended which outweighed any amount of tenant-right. It was most essential that a correct idea of the value of the tenant-right should be known before a farm was taken, so that no miscalculations might cripple the after management. Then machinery and implements were a great expense in the first year, but without them no farmer could make headway in the present day. This expense would be proportionately heavier on a small farm than on a large farm. He thought he had given a moderate estimate of the amount required for cake and artificial manures. The consumption of cake was, perhaps, the one grand feature in high farming, and the more stock they could keep in an improving condition the better for themselves and for the land. The item of repairs was sometimes forgotten; and although it was not a large payment, yet if it came without being calculated upon it was sure to be troublesome. They must bear in mind that this capital which was invested was only returned at long intervals, and sometimes they had to wait for better seasons and improved markets before they secured the whole of their capital with interest. It was in this waiting that the man without capital came to grief. No doubt there were instances where men with small means had been fortunate enough to meet with an exceptional season, and thereby raise money enough for the continuance of the farm, but these instances were rare. It is not to be understood, however, that capital was the only thing requisite; it must be coupled with practical knowledge and sound judgment. The want of practical knowledge and sufficient capital were the two great causes of agricultural failure. With regard to the question, Does farming pay? he answered not at present; but it would pay when properly conducted. With freedom from imported disease, and the evidence of that consideration which agriculture would really claim, the capital would not be wanting to improve the producing power of the land. It was in the public interest that the country should produce largely, and anything which hindered that production was an injury to the country.

Mr. BENNETT thought that the estimates set down in the paper were a little too low; but the cost depended very much on the locality. Most of them were of opinion that farming did not pay at present; but he did not think that that was owing to deficiency of capital. There were other reasons which accounted for it. Still, farmers were apt to take farms too large for their capital, for they did not consider when taking them that a very heavy tenant-right put so much per acre on the rent of the land.

Mr. BROGDEN thought that an estimate of £13 per acre was rather under than over-rating the cost. His own impression was that £15 an acre was required.

The Rev. C. H. SALE thought there was not so much more capital required for farming now than formerly as many people supposed. If there was more required for machinery and implements, there was a recompense in the work being better done; and though there was no doubt a heavier expenditure for cake and artificial manures, yet the farmer of the present day had the advantage of quicker returns.

The CHAIRMAN agreed with the last speaker that farmers in the present day could turn over their stock much more quickly than was the custom thirty years ago.

Mr. T. SCOTT said that profitable farming meant high farming. But the question of quick returns was not a matter of capital, but of profit. If they turned out their stock at an earlier age than was the custom formerly, yet they had to get them into condition by artificial manures, and therefore there was the same amount of invested capital as if they kept the stock three or four years.

**THE LOCUSTS OF BRITISH AMERICA.**—The first annual report of the United States Entomological Commission relates to the Rocky Mountain locusts and the best methods of preventing its ravages. The permanent breeding ground, which has its southern limit at 38 deg. N., extends up into British America as far as 53½ deg. N., between 109 deg. and 113 deg. W. The sub-permanent breeding ground extends east of this area to Lake Winnipeg and part of Manitoba. The region periodically visited extends beyond this only to 95 deg. W., and does not reach so far north as the permanent breeding ground. The area of periodical visitation in the States is very extensive, reaching as far south as 28 deg., and stretching across in some parts from 93 deg. to 119 deg. The maps indicating the areas of greatest ravages and the directions of migration show that while in 1874 and again in 1876 the greatest destruction occurred south of 47 deg., the locusts from British territory help to swell the number of the invading swarms. The report speaks of the friendly co-operation between the States and Dominion Governments in investigating the subject, and the remedies and devices for checking the plague are discussed at some length.—*Times*.

**WHAT RABBITS CAN DO.**—Through the courtesy of Mr. G. A. Gebhardt, of Mackeroda, near Kooringa, on whom our special reporter called during his tour through the rabbit-infested country, in the North, we are able to give some further particulars as to the destruction done in the Mount Bryan district—one of the head-centres of the roset tribe—and also some information as to the process of extermination by means of bisulphide of carbon. Mount Cone is the name of Mr. Gebhardt's station, which is about eight miles from the Burra in the direction of Mount Bryan and Halle's. A few years ago Mr. Gebhardt was able to keep from 12,000 to 14,000 sheep on this run, but owing to the alarming increase of the voracious little rabbits he can now only maintain about 7,000 sheep, and these have so much of their food eaten up that the percentage of lambs has fallen from about 80 per cent. to 50; and this in spite of the fact that hundreds of pounds have been spent in killing the rabbits and destroying their burrows. On one occasion, three years ago—when the rabbits first came in swarms to the locality and ate up the grass—a thousand of Mr. Gebhardt's sheep died in one paddock. This year, one paddock—2,300 acres in extent—has been wholly given up to the bunnies. It is close to the Mount Bryan head-station. The owner and the people generally in the district have given up killing until Parliament passes an Act making it compulsory on the part of all owners or occupiers to destroy the pest on the land. One 200-acre section sown with wheat this year is now as bare as a road. In another large paddock—1,300 acres in extent—the rabbits have killed all the trees and bushes by their simple method of barking them. At different times the owner of Mackeroda has imported from Germany lucerne, rye, prairie, and other grasses, but he has stopped the cultivation of them rather than feed the rabbits on these luxuries. Indeed so great and so general has been the destruction on the Mount Cone Run that he is afraid he will have to remove his stock if something decisive and general is not done promptly. Mr. Trelligan, a neighbouring farmer, lost one paddock this year, and rather than sacrifice the wheat on another he has fenced it with wire netting at a cost of about £50 a mile. The District Council of Mount Bryan has levied rabbit rates to the extent of 2s. 3d. in the pound during the last 18 months, but they have now suspended operations until the fate of the second Rabbit Bill is seen. They used to have weekly deliveries of rabbits, and sometimes the number of souls received in one day was 40,000 or 50,000. Of the 50,000 sent in on one occasion, 14,700 came from the Mount Cone estate, and then the District Council Bank stopped payment. *Adelaide Observer*.



## Death of Mr. Henry Corbet.

With much regret we announce the death of Mr. Henry Corbet, for many years Editor of the *Mark Lane Express*, aged 53. Mr. Corbet had been suffering from paralysis for three years, and gradually sank from the effects of the disease. At the end of 1875 he was compelled to retire from active work, and although he first tried change of air and scene, it soon became apparent that recovery was hopeless. His death took place on Sunday, December 20. A sketch of Mr. Corbet's life appeared in the *Farmers' Magazine* for April, 1878.

The funeral of Mr. Corbet took place at Chesham on January 4, his remains having been conveyed to that town in order to be buried with those of his father, which rest there. The funeral was of a strictly private character, only relatives of the deceased having been invited to attend.

Having so recently given a sketch of Mr. Corbet's life, a few particulars will suffice on the present melancholy occasion. Mr. Corbet was born on December 31st, 1820. His father was a country gentleman, well known as an ardent sportsman in his own district. He was educated at Bedford Grammar School, and prepared for the University, which, however, altered circumstances prevented him from attending. In 1846 Mr. Corbet, who had been some time residing in London, was elected Secretary of the Farmers' Club in preference to a large number of competitors. During this year he wrote his admirable Prize Essay on "Tenant Right," which is as nearly exhaustive as an essay can well be, and remains today as unanswerable an argument as when it was written. His next work was a Digest of the Agricultural Customs of England and Wales, compiled from the evidence given before Mr. Pusey's Tenant-Right Committee in 1848. Mr. Shaw, then Editor of the *Mark Lane Express*, was associated with him in the production of this book; but we believe that Mr. Corbet did nearly all the work.

In 1853 Mr. Corbet became a member of the *Mark Lane Express* staff, and shortly afterwards he undertook the editorship, which he held till December, 1875, when he was compelled to retire on account of ill-health. For the same reason he gave up the Secretaryship of the Farmers' Club, a position which he had held for nearly 30 years. He was then presented with a pecuniary acknowledgment of valuable services rendered, and this was followed by a more substantial testimonial, presented last year by his agricultural friends generally.

Mr. Corbet was a member of the Royal Agricultural Society of England—of which he was for some years an Auditor—a member of the Council of the Royal Agricultural Benevolent Institution, a member of the Smithfield Club, and connected with other associations for the advancement of agriculture. In 1876 he was elected a

member of the Agricultural Society of France, in recognition of "eminent services rendered to agriculture."

Besides the literary work previously alluded to, Mr. Corbet wrote "Tales and Traits of Sporting Life," and contributed to the Royal Agricultural Society's *Journal*, the Bath and West of England Society's *Journal*, *All the Year Round*, and other journals and magazines. He also read many papers before the London and other Farmers' Clubs.

In many respects, and especially as a live stock critic, Mr. Corbet was an acknowledged power in the agricultural world. He was accustomed to express his opinions fearlessly and independently, and by so doing he offended many, though he also gained admirers on account of his staunchness and courage. Lest our own evidence alone should be thought partial, we quote an estimate of Mr. Corbet as a stock critic from the *Ipswich Journal* of January 4:—

To many of our readers Mr. Corbet was known as a brilliant writer on almost all kinds of live stock. In the files of the *Mark Lane Express* may be found some of the most finished descriptions of famous horses and other animals that are to be found in the language. It was Mr. Corbet's practice to attend all the larger shows, and he was usually present at our county shows in the Eastern Counties. He was an unsparing critic, and if a defect existed the owner of the animal had only to hope that Mr. Corbet might not see it—the animal we mean, for he was sure to see the defect if he came to close quarters, and he was certain to point it out. Practical men held Mr. Corbet's judgment in great respect, and a celebrated judge of horses once said of him that he was as good a judge as a man could be who had not been a breeder. With a very wide experience of the celebrated animals of the last 30 or 40 years, ripe judgment, and a fine, clear, vigorous style, Mr. Corbet always made his live stock reports readable and valuable.

Mr. Corbet was pre-eminently what is termed "good company." He had a strong sense of the ludicrous, and his anecdotes, of which he had a good store, were both good and well told. There are many who, in spite of an occasional "tiff" with him, will now recall many a pleasant hour spent in his company; and there are many more—in his wide circle of readers—who will never forget the earnestness and vigour which he devoted to the advancement of agriculture and to the removal of the abuses which check its progress.

**JEALOUSY IN OLD AGE.**—From Enfield we hear of a woman aged a twenty-four committing suicide from the supposed motive of jealousy of her husband, who was seventy-five, but who she could not bear to see talking to any other woman. It is impossible to avoid a smile at the idea of the "green-eyed monster" interfering with the peace of a couple of old people whose united ages make 149 years.—*London Express*.

**"VESTMENTS."**—High Church housemaid (to low Church cook.) "Lor, cook, how can you sit and listen to a man as wears nothin' but black alpaca! You should have seen our young priest this morning! He had on a black silk skirt, with a white cambric tunic trimmed with real Wallaseens lace as missie give him, a narrer high-art green scarf round his neck; an' when he folded his arms across his buzzum, with his 'air parted down the middle, oh, he looked perfectly luv-e-ly;"—*Ibid.*



## THE CROP RETURNS.

(From the *Mark Lane Express* of January 6.)

In our Supplement to-day will be found the 'Crop Returns for 1878, collected from several districts in each of the English Counties, and from five of the counties of Wales. In all respects they confirm our anticipations, and justify the estimates which, in the face of much contradiction, we have maintained in these columns, both before and since harvest. While reports of an abundant harvest were being published throughout the length and breadth of the land, we stood almost alone in protesting against such sanguine estimates, which could only mislead, and did mislead, the general public. The season had been so antagonistic to the growth of healthy corn crops that we could not believe a generally large yield possible, and a careful examination of the wheat crop showed that the ears were not well filled with grain, while the barley crop was obviously a rather light one. We stated our conclusions, therefore, to the effect that the wheat crop at the best was only a bare average, and that barley was below average. We were accused of "croaking," and the multitude of witnesses, if not the weight of evidence, was certainly against us. There was such a full crop of wheat straw that those who had not taken the proper means to ascertain what was in the straw could not be made to believe that the yield would be anything less than a very great one. By-and-by, however, as the thrashing machine got to work, reports began to come in of wheat yielding less than had been expected, and these reports became quite general as time went on. Now that a considerable proportion of the crop has been thrashed, it will be seen that out of 394 returns, collected from farmers and corn merchants, 122 are under average, 193 average, and 79 over average. This, as we fully expected, is by no means so bad a result as we had to chronicle at this time last year, with respect to the wheat crop of 1877, when out of 409 returns, 369 were under average, 34 average, and only 6 over average. But the wheat crop of 1877 was, as stated last year, the worst that we had reported on during a period of fifteen years. The crop of 1878, on the contrary, is better than most of the generally bad crops of the last ten years, being only beaten by those of 1870 and 1874, as a reference to a table given below will show. In fact the crop of 1878 was so nearly an average one that if prices had been satisfactory it would have been a paying crop. Still, instead of having been underrated in our early estimate, it was done a little more than justice to by being described as a "bare average."

The barley crop, though good in exceptional districts, was generally admitted to be inferior to the wheat crop. Out of 379 returns, 170 are under

average, 168 average, and only 41 over average. This, again, is a little better than the result published last year for the crop of 1877, with respect to which, out of 395 returns, we reported 260 to be under average, 116 average, and only 19 over average. That crop, like the wheat crop, was the worst, as shown by our returns, during a period of fifteen years. Our ten years' table given below shows that the barley crop of 1878 ranks about fifth in the scale of deficiency, being, however, very little better than the crop of any year but 1869, which appears to have been the worst barley year of the ten.

Oats stand a wet season better than the other scereal, and it is not, therefore, surprising to find them represented in our abstract as the best of the three white-straw crops. In the ten years' table the oat crop of 1878 stands as the third best.

Of the pulse crops, beans, which love plenty of rain, appear much more to advantage in our abstract than peas, which do badly in a very wet season. Thus the bean crop of 1878 is about the fourth best of those of the past ten years, while the pea crop is one of the worst.

## ABSTRACT OF GRAIN CROP RETURNS FOR 1878.

1878.	Wheat	Barley	Oats	Beans	Peas
Over Average .....	79	41	74	35	9
Average .....	193	168	213	131	132
Under Average .....	122	170	91	82	114
Advices .....	394	379	378	248	215

## SUMMARY OF GRAIN CROP RETURNS FOR TEN YEARS, ENDING WITH 1878.

## WHEAT.

Years.	Advices.	Over Average.	Average.	Under Average.
1869	511	33	183	295
1870	487	118	213	156
1871	478	29	121	328
1872	454	22	78	354
1873	445	17	84	344
1874	432	328	81	23
1875	420	7	53	360
1876	414	33	131	250
1877	409	6	34	369
1878	394	79	193	122

## BARLEY.

Years.	Advices.	Over Average.	Average.	Under Average.
1869	489	27	185	277
1870	521	59	144	314
1871	462	111	244	107
1872	437	41	185	211
1873	426	86	266	74
1874	413	98	181	134
1875	407	81	227	99
1876	397	34	172	191
1877	395	19	116	260
1878	379	41	168	170

## CATS.

Years.	Advices.	Over Average.	Average.	Under Average.
1869	491	32	209	250
1870	442	22	106	314
1871	458	123	275	60
1872	430	103	228	101
1873	413	71	233	109
1874	403	37	139	227
1875	398	70	183	146
1876	397	32	134	231
1877	396	40	149	207
1878	378	74	213	91

## BEANS.

Years.	Advices.	Over Average.	Average.	Under Average.
1869	452	24	167	261
1870	335	5	99	231
1871	353	74	177	102
1872	323	72	166	85
1873	313	47	169	97
1874	307	9	85	213
1875	298	16	100	183
1876	280	8	118	154
1877	276	5	48	223
1878	248	35	181	82

## PEAS.

Years.	Advices.	Over Average.	Average.	Under Average.
1869	408	10	98	300
1870	344	21	180	163
1871	396	135	186	75
1872	352	48	146	158
1873	336	39	206	91
1874	326	13	115	198
1875	300	10	81	209
1876	290	37	156	97
1877	282	5	76	201
1878	245	9	122	114

Both turnips and mangels are a little over average, as represented in the summary below, turnips being the better crop of the two. The hay crop was well-known to be a remarkably heavy one, and our summary of the returns for this crop presents the very pleasant feature of a blank in the "under average" line. We are glad to see the potato crop reported on much more favourably than it was last year. After the abstracts of returns for roots, hay, and potatoes for 1878 we give those of the previous year, in order to show the improvement in each case, making altogether the most satisfactory portion of our present Crop Returns.

## ABSTRACT OF ROOT, HAY, AND POTATO CROP RETURNS FOR 1878.

1878.	Turnips.	Mangels.	Hay.
Over Average.....	94	79	279
Average .....	216	199	119
Under Average .....	72	65	—
Advices .....	382	343	393

## POTATOES.

Free from disease .....	20
One-eighth diseased .....	74
One-fourth .....	99
Three-eighths .....	51
Half .....	63
Five-eighths .....	22
Three-fourths .....	16
Seven-eighths .....	4
Failure .....	1

Advices..... 349

## ABSTRACT OF ROOT, HAY, AND POTATO CROP RETURNS FOR 1877.

1877.	Turnips.	Mangels.	Hay.
Over Average.....	53	10	136
Average .....	138	159	263
Under Average .....	220	208	19
Advices .....	411	377	418

## POTATOES.

Free from disease .....	4
One-eighth diseased .....	28
One-fourth .....	70
Three-eighths .....	51
Half .....	132
Five-eighths .....	54
Three-fourths .....	39
Seven-eighths .....	15
Failure .....	3

Advices .....

## CATTLE DISEASES.

By the Revocation (No. 2) Order in Council, dated 19th December, 1878, and taking effect from and after the 31st, all Orders in Council made at an earlier date are revoked with the following exceptions, which constitute the entire existing body of Privy Council as distinct from statute made law, as regards contagious diseases and importation of live stock into Great Britain:—

## FORMER ORDERS REMAINING IN FORCE AFTER THE COMMENCEMENT OF THIS ORDER.

No.	Date.	Subject or Short Title.
442	Aug. 16	1878. The Animals Order of 1878.
443	" 16	The Diseased Animals (in transit) Order of 1874.
444	" 16	The Infected Places and Areas (Movement) Order of 1878.
445	" 16	The Cleansing and Disinfection Order of 1878.
446	Oct. 5	Metropolis—Pleuro-Pneumonia—Movement.
447	" 5	Edinburgh—Pleuro Pneumonia—Movement.
448	" 25	Veterinary Inspector—Definition.
449	" 25	Glasgow—Pleuro-Pneumonia—Movement.
450	Nov. 12	Leith—Pleuro-Pneumonia—Movement.
451	Dec. 6	The Foreign Animals Order.
452	" 17	The Typhoid Fever of Swine Order of 1873.
453	" 17	Belgium and Germany—Importation.
454	" 17	Grimsbay—Foreign Animals Wharf.
455	" 17	Hartlepool—Foreign Animals Wharf.
456	" 17	London—Foreign Animals Wharf.
457	" 17	Plymouth—Foreign Animals Wharf.
458	" 17	Sunderland—Foreign Animals Wharf.
459	" 17	Southampton—Foreign Animals Wharf.
460	" 17	Southampton—Foreign Animals Quarantine Station.
461	" 17	Edinburghshire—Pleuro-Pneumonia—Movement.
462	" 19	The Transit of Animals Order.

THE METRIC SYSTEM.—"William," began a Second-street woman as she laid aside the daily paper, "what is this new metric system proposed by Alexander Stephens?" "It's a very wise measure, indeed, my dear," he replied. "Suppose you want a new dress, costing one dollar per yard?" "Yes," under the metric system you write to your father in Wisconsin for the money to buy it with. The money comes; you take half of it and buy me a pair of pants, and then you use the rest in purchasing fifty-cent dress goods. It is a very good measure, very good." "And they propose to make it a law, do they?" "They do," "Well, sir!" she exclaimed, showing a red spot on each cheek, "when the metric system comes into practice in this family, divorce will follow, and Alexander Stephens is a fool, sir, a fool!"—*Detroit Free Press.*

## LAND-HOLDING AND AGRICULTURE IN RUSSIA.

We take from the *Carlisle Patriot* the following report of an interesting description of the observations made by the Rev. James Christie, of Carlisle, during a visit to Russia:—

MR. CHRISTIE began by saying everyone had heard, and most people had read, about the great Russian fair at Nijni Novgorod, held between the middle of July and the middle of September, the eight weeks or so during which the greatest amount of business was transacted. Nowhere else in Russia could a better insight be had not only into the manners and peculiarities of the frontier populations, and into the costumes and commodities of non-Russian Eastern and Westerners, but likewise into the commercial enterprise of the Russians proper, whose merchants bring themselves thither from every part of the country. He detailed certain arrangements that had to be made before he and his companion, Captain Rickard, started from Moscow to Nijni, and remarked, *en passant*, that when our fellow countrymen living in Russia wanted English books, quarterlies, or newspapers, it was necessary to order them through a Russian bookseller, otherwise they would be hardly ever allowed to cross the frontier. When he left home he gave orders that the local newspapers were to be sent after him by post to different towns on his route, but he had not received a single copy. The censorship of the press was exceedingly strict. He happened to be in St. Petersburg when General Mertzow was assassinated, and for a week after the tragedy not a day occurred but one, and sometimes two of the columns of the German newspapers which referred to the social condition of Russia, were erased by the censor's order before the journals were allowed to be circulated in the capital. The distance between Moscow and Nijni is 273 English miles. The journey was through the province and town of Vladimir. The town is now a great cotton manufacturing centre; the province is one of the richest in Russia for agricultural produce and manufactures. Part of the journey was made during night. "When the rosy morn broke," the rev. gentleman went on to say, "we found ourselves being hurried through a fertile and interesting country, thickly dotted with comfortable and prosperous looking peasant villages, and here and there a church, whose gilded domes glistened in the fresh glory of the rising sun. It was the middle of harvest, and thus early all who could bend the back and use their hands in husbandry were far afield; the women, bareheaded and barefooted, reaping; the men either ploughing the land whence the harvest had been gathered, or sowing rye, in due season to be converted into the black bread of the country. "The modern history of this fertile district is exceedingly interesting. Until the time of the emancipation of the serfs all the land in the direction of the Volga was one unbroken forest, yielding, of course, hardly any return, or most likely none at all, to the proprietors; but now, since the communal system has been introduced alongside the act of liberation, and each male peasant has his allotment of so many acres, the forest has almost entirely disappeared, the tree roots have been stubbed, and loaded and golden plenty in average years both beautifies the landscape and gladdens the hearts of these humble and incessant toilers. It is impossible not to be intensely interested when we are informed by good authority of these facts—facts which hold good in all parts of free Russia as well as in the watershed of the Volga, because they serve to dispossess the mind of ideas which a class of writers had carefully instilled, or at any rate attempted to do so. Before emancipation became a fact practically worked out, there were those who prophesied that the peasants, as soon as they found themselves free, with land of their own, would degenerate into chronic idleness, and become as notorious for their sloth as the Negroes in the West Indies after they were liberated by England. After the emancipation there were certainly not a few of the late serfs who, in their ignorance and simplicity, rejoicing in their newly-acquired liberty, seemed to think that, freed from the dread of the knout, life was to be one long holiday, and their example only gave redoubled vigour to the vaticinations of the grumbler's that the whole thing was an utter failure, and that the empire was going—to the dogs, sir; yes, sir, to the dogs! It is so very easy for some minds

to lay hold of an exceptional instance, and raise it to the height of an eternal principle. A very short time, however, sufficed to disabuse the minds of the peasants of all their Utopian fancies, and, settling down under the pressure of a blessed necessity, they began to work and improve their position; and they still work, and work better with every added year of liberty. . . . Between the liberated English slave and the liberated Russian serf there was this difference. The English slave secured his liberty at once, and had no special tax laid upon him, which should remind him of his former bondage; the Russian serf also secured his liberty at once, but upon the introduction of the communal system of land holding, in which every male has an indefeasible right to a certain portion of land, a land tax was laid upon the commune for the period of fifty years, that the landed proprietors and former serf holders might secure a certain amount of compensation for the loss they had sustained. It is most likely that a good deal could be said for such an arrangement, and just as likely that a great deal could be said against it, and all I say is just this, that from all I could learn, the arrangement has produced no profound dissatisfaction. The serfs have been liberated now for sixteen years, and all is working well. May it do so, I say, till the fifty years have run, introducing into that vast and mighty country an endless jubilee, in which Russia's patient, gentle, and hard-toiling sons of the soil shall rejoice in the triple bliss of manhood and manhood's rights and manhood's possessions. It cannot be that Russia will ever allow the name and memory of Alexander the Second, the good and generous Czar, to be forgotten, who, in the liberation of his serfs, did so much to bring his country out of the depths and darkness of barbarism, and place her alongside those nations which form the van of civilisation and empire. England, America, and Russia, three countries intensely democratic, as those who know the people's pulse best are well aware, although two of them have a form of government most opposed to such an order of things, have many things to be proud of, but as I take it their proudest boast before God and man may well be this, that none of them bear on the national escutcheon the bar sinister of slavery, but that in all of them every man is free, and that from this moment every child that opens its eyes upon the light of heaven shall enjoy the inestimable privilege of being free-born." The town of Nijni Novgorod and the fair were graphically described. He said it was estimated that fully half a million traders visit the fair during eight weeks. This year the trade has been immense, and the rejoicings at this result are unbounded. Smoking was strictly prohibited within the bounds of the fair proper. The sanitary arrangements of the town are admirable, a perfect system of stone built sewers having been constructed, and they are flushed with water from the river twice each day. But the moral of the fair were something frightful. Upwards of 10,000 persons were imported or import themselves, mostly Germans, Swedes, and Tartars, whose virtue, to speak with a euphemism, is supposed to be easy; they formed a village beyond the fair, and the orgies practised there were so barbarous that those conversant with the place say—"There is no viler hell on earth than Nijni Novgorod during the fair time for those who choose to make it so." It was quite a common thing for the Russian youth, entering upon manhood, to indulge in one wild and unrestrained debauch at the fair, which often costs them £5,000, and then to settle quietly down into provincial life. He had a very enjoyable trip down the Volga to Kazan. Navigation was difficult, owing to the reduction of the volume of water by summer's drought. It was to be feared that unless Russia looked after her own interests, so far as her rivers were concerned, she would lose the practical use of many of them before many years expired; they were gradually going down, sandbanks were accumulating, and no dredgers were introduced, or what was more important, no effort was made to strike at the root of the disease, to arrest the serious fluvial depletion. In his travels he found wood was the only article of fuel used—not a bit of coal did he see in use. Granted then a vast country, using nothing but wood for fuel, it was easy to understand the forests, which so directly affect the rainfall, must be gradually and seriously decreasing in size, the more so when no steps are taken either by the Government or private enterprise to maintain any system of planting anew. The effects of sunset and sunrise on the Volga were glorious—beyond compare. Kazan boasts of 126 factories of different kinds. The fruit stalls were literally groaning; there were

melons, apples, and pears—the latter deserving the cognomen of “The Congress of Berlin,” one of the latest names given to a choice variety, a variety of toothsome fruit, much more toothsome he should be inclined to say than the European Congress was ever likely to prove to any one member of the brotherhood of Empire—luscious grapes, dates, and figs, the first fruits of the season. At Kazan the Tartar women, closely veiled, walk abroad, although they are commonly followed either by their husbands or by some aged female, who carries the baby; veiled though they are, however, they are not insensible to the presence of the “infidel,” and if they think the husband won't see (they do not care for the old woman), they very deftly and quietly draw aside one corner of the veiling shawl and take a good look at you. They have ruddy cheeks and dark eyes, and are a good deal more than good looking. After alluding to the unhealthiness of Kazan, he remarked that the only instance of brutality he observed in Russia was at that place. Touching on the subject of agriculture, land-holding, &c., Mr. Christie said the peasantry live in small villages, containing from half a-dozen to a hundred houses. A peasant's house, as on the banks of the Volga, was not particularly inviting to look upon, but the majority of them were quite as comfortable and far more commodious than many an English farm labourer's hovel. The houses were entirely built of wood, the chimney standing up in the middle of the slanting roof. In the corner of the kitchen was invariably to be found the sacred image, or “Ikon.” There are generally three windows in each cottage, to allow not only the light of day, but also of the Trinity, to get in. A large stove stands in one corner, and above it is the “Palata,” or sleeping place; wooden settles, used as beds, range round the walls; and three, with a table, a gaily metalled trunk or two, and a very small assortment of ordinary domestic articles, constitute a Russian peasant's household. Each cottage has a piece of vegetable ground or garden behind, one portion of which is used for producing sunflowers. Every village has its common orchard, as well as its public bath rooms; and every house has a bath. Cattle sheds range behind the houses; windmills are numerous over the country. Each male peasant has from 15 to 30 acres of land, according to the quality of the soil, and this is farmed on what is called the “three-field system,” which means—one-third annually lies fallow, another grows wheat, and the remainder rye and grass. In every village there is a church, generally with outer walls whitewashed, and gay with green-painted domes. “The peasants in Russia,” Mr. Christie continued, “own upwards of 70 millions of acres. The nobles have vast estates besides, but so great is the extent of the country and so scanty in proportion to the land is the population, that large districts still remain uncultivated. In the south, and in what *par excellence* may be called the granary of Russia, some corn speculators occasionally farm as many as five and ten thousand acres, renting them at twopenny per acre. This grain is entirely grown for export purposes. For the last few years the Russian wheat has not been in such demand as formerly, on account of its lessened size. Nor is this difficult to account for. The land is not manured, and because of this it gradually becomes so exhausted that in many parts it must lie fallow 15 years before it will yield another crop. At present this produces no great practical inconvenience, if we except the diminished export trade, seeing that when his allotment is exhausted the peasant just removes his plough and farming gear to a patch of virgin soil; but when the population of Russia has grown, as it must do, some sort of system, which the peasant would now consider high class farming, must be introduced. The very manuring of the soil, owing to the climate, would be no small difficulty, and those who know the country best are of opinion that it could be best done by parking sheep, but for no longer time in any one year than 24 hours. To do this for any longer would make the land too hot; in droughty seasons the grain would be burned up, and in wet seasons it would run all to straw. Rye is an autumn-sown grain, and when it gets proud, because of the autumnal rains, it is eaten down before winter, and thus is preserved and set; in spite of this, grain in Russia grows best when sown in damp or wet soil, as this hastens the period of germination. In the north of Russia the land is generally poor, down the great arterial river of the Volga it is good, and in what is called the black earth country—so called from the colour of the soil, an extensive zone extending almost from the gates of Moscow to within sight of the beautiful waters of the Dnieper—it is rich beyond compare. The soil in

this zone varies from 6½ to 18 inches in depth. Some English farmers have settled down on it and have succeeded well, and even in the thinner-soiled regions—as, for example, between St. Pet-rburg and Moscow—if a Dutch Boër, or, better still, a Scotch farmer, only got an allotment of a few thousand acres, he would think himself in paradise.” The seasons differed greatly and the climate was very unpropitious in some districts for raising crops. He concluded as follows: “In the north of Russia the harvest is late, thousands of acres were standing uncut when I travelled through it at the end of August. But when the grain has once been reaped and gathered the autumn sowings are soon got over. The harrow follows the plough in that light, friable soil, the sower follows the harrow, and another harrow follows him, and the work is done. The grain soon germinates, and then comes the welcome snow to protect the tender blade from the rigour of winter. The thrashing floors are of the primitive order, a piece of ground beaten hard in the middle of a field or near the corn stacks, and then when the straw is removed women toss up the grain into the air and winnow it. In the North the horse only is used in agriculture. Midway between Moscow and Kief the ox appears, and between them horse and ox perform the labour of the field. Midway between Kief and Warsaw the horse finally disappears, and the ox remains lord of all he surveys. Vast herds of oxen, sheep, and thousands of swine are seen from time to time out of the railway. The Russian pigs have a mane right down the back like the wild boar. Probably they are a cross. The shepherds of Russia are the basest and most ignoble of men. The peasants are a hard-working, yes, even a slaving class. Once that the snows and spring rains have disappeared it may be said they never rest from their arduous labours until winter returns, when they take their rest with a vengeance by sleeping for days and weeks together, all around, and if not exactly within, at any rate upon the top of the broad flat stove. The summer season is called by them ‘passion’ time, because of the length and severity of the toil. In the harvest season they camp out in the fields, and toll from the dawn of day until dew eve has sunk into the darkness of the night. Brave fellows, noble wives and daughters, ye peasant women, ye know not what it is to eat the bread of idleness. Devout, God-fearing, and passing industrious, the Russian peasant has a noble future before him. Field industry generally begins about the third week in April, and closes with the first week of October, and then begins the season of village fairs and harvest festivals, and no end of junketting. The male peasants, brushed up, wearing felt or leather boots, red shirts, tall hats which would fetch a premium at Donnybrook, and sheep skin coats, meet together and discuss the affairs of the commune. The matrons also meet together, but what they talk about it would perhaps be difficult to say, and the young marriageable girls go to the church in a body, and pray, saying, ‘O our lady, mother of God, cover the earth with snow, and protect us with young men.’ And the snow soon comes and covers up every deformity, and makes all lovely and bright beneath the clear blue sky, and the young men come too, and there is mirth, and dance, and song, and marriage bliss in Russian peasant homes, and thus the year goes round, and life goes on from generation to generation.”

**FAITH**—The Prince of Wales and Dr. Lyon Playfair were standing near a caldron containing lead which was boiling at white heat. “Has your Royal Highness any faith in science?” said the Doctor. “Certainly,” replied the Prince. “Will you, then, place your hand in the boiling metal, and ladle out a portion of it?” “Do you tell me to do this?” asked the Prince. “I do,” replied the Doctor. The Prince then ladled out some of the boiling lead with his hand, without sustaining any injury. It is a well-known scientific fact that the human hand may be placed uninjured in lead boiling at white heat, being protected from any harm by the moisture of the skin. Should the lead be at a perceptibly lower temperature, the effect need not be described. After this let no one underrate the courage of the Prince of Wales.—*World*.

**STANDING ROOM FOR THE HUMAN RACE**.—An Englishman with a hobby has discovered that there is room for all creation on the Isle of Wight. According to the most recent estimate the population of the earth is about 1,440,000,000. Two square feet of standing room being allotted to each individual, this number would cover 66,116 acres; and the area of the island is 93,311 acres.—*Pacific Rural Press*.

## THE NEW LIMITATION ACT FOR LAND.

Another of the alterations which the present century has witnessed in the laws affecting landed estate came into effect on Jan. 1. The "Act for the further limitation of actions and suits relating to real property" was introduced by the Lord Chancellor and passed in 1874, but its operation was only to commence on the 1st of January, 1879. Full notice was thus given of an enactment which cuts down considerably the period during which the person entitled to lands is permitted to lie by secure, without being held to forfeit his right by want of vigilance in asserting it. A similar statute, but with periods of limitation which were less in each case by a year, had been brought in by Lord Selborne previously to the introduction by Lord Cairns of the statute now under consideration, so that the law which has now come into force had the approval in principle of able jurists of each great political party. The precise terms of years fixed in the Act were chosen because they had already been adopted in Indian legislation. The Real Property Commissioners, upon whose recommendation the whole system of procedure relating to land has gradually been remodelled, wrote 40 years ago that "as knowledge is diffused, and the administration of justice becomes regular and pure, the periods of limitation may be safely abridged." The general principle upon which statutes of limitation are founded was discussed with sufficient clearness and great brevity in the Commissioners' first report. They observed that it might be considered that the duration of wrong ought not to give it sanction, and that the long suffering of an injury should be no bar to the obtaining of right when demanded. But the Commissioners were of opinion, and most law-givers have agreed with them, that human affairs must be conducted on other principles. It is found to be of the greatest importance to promote peace by affixing a period to the right or disturbing possession. Owing to the perishable nature of evidence, the truth cannot be ascertained in any contested question of fact after a considerable lapse of time. The temptation to introduce false evidence grows with the difficulty of detecting it, and at last long possession affords the most trustworthy proof of the right to property, and becomes, accordingly, not merely the proverbial "nine points," but the whole of the law. By the statute of 32 Henry VIII., cap. 32 (entitled "An Acte for lymittacion of prescripcion"), limitation was reduced to 60 years from 352, at which it then stood; and by 21 James I., the period was again reduced, for all practical purposes, to 20 years. This limit is henceforth diminished by nearly half.

From Jan. 1st no land or rent will be recoverable, no entry or distress can be made, but within 12 years after the right of action, entry, or distress accrued. If the dominion over the land has been broken up by wills or settlements so that, for instance, one person has a life estate and another is entitled to the property subject to the life estate, then a different period of limitation is established. The limit is 12 years from the accrual of the right, or six years after the life estate falls in, whichever of these periods is the longer. Thus, if the Earl of Broadacres has neglected to claim his lands or rents, his eldest son may proceed for them within six years after coming to his estate, even if the 12 years from the time they first became his father's have expired. After those periods—the 12 years and the six—have elapsed, but not till then, his rights are barred. Till the beginning of this year he would have had 20 years from the accruing of the rights, and ten years from the death of the tenant for life. A similar provision to that last recited is made in the case of infancy, coverture, or lunacy. The infant, married woman, or lunatic, or a person claiming through any of these, has six years after the determination of the disability. In the old days the period of grace was ten years.

The increased facilities for communication with distant parts of the world have led to a noteworthy alteration in the law. Formerly, in all such statutes as the present not only was lunacy and other disability provided for, but absence beyond seas was also taken into account. A wandering heir had ten years after his return in which to bring his action; but now that the telegraph runs or will soon run to almost every place in which a claimant is likely to lurk, it has been thought (in accordance with the principles of a previous Act, 19 and 20 Victoria, cap. 10) that this provision can safely be omitted.

The term of ten years is in this case not reduced to six, but is abolished altogether. Of course, the ordinary 12 years will be allowed; but if the emigrant does not return before the expiration of this period his rights will be indefeasibly barred. A curious feature in the Act is that its framers, inspired by anxiety to quiet the estates of sane persons, have provided that lunacy or other disability for a period exceeding 30 years will extinguish even the right to wait six years after termination of the disability. The old period was 40 years, a delay which, having regard to the duration of human life, was more likely to prevent heirs from suffering by the disabilities of their predecessors, coupled with the negligence or fraud of committees, guardians, and husbands. Another clause relates to those settlements of landed property which are so common in this country and contribute so powerfully to keeping land in the possession of the same wealthy families from generation to generation. It is provided that in case of possession under an assurance by a tenant in tail which does not bar the reversioners they shall be barred at the end of 12 years after the date at which the assurance, if then executed, would have barred them. A mortgagor is to be barred at the end of 12 years from the time when the mortgagee took possession, or from the last written acknowledgment. Money, the payment of which is charged upon land, and legacies, are to be deemed to be satisfied at the end of 12 years if no interest is paid nor acknowledgment given in writing in the meantime. In short, the effect of the whole is to reduce the time to which a fair holding title should refer from 20 to 12 years, although doors are still left open which will prevent a 12 years' holding without registration from absolutely guaranteeing undisturbed possession in the future.

The statute is to be read as one with the unrepealed portions of the Act of William IV., cap. 27, which previously regulated the subject. The law of limitations is almost entirely the creation of statute. It has been found necessary in most civilised communities to make some provision for securing that finality which is the interest of the common weal. In Athens the period was five years, in Rome it was fixed at varying dates by successive laws. In Cicero's time two years' undisturbed enjoyment gave the right to land, and one year's possession entitled the holder to keep his hand upon movables. In some States a general remission of debts from certain dates has been from time to time declared. The English Parliament fixed, in 1285, the beginning of the reign of King Henry I., the return of King John from Ireland, the journey of Henry III. into Normandy, and the coronation of King Richard I. as dates which the Courts should not go behind; and one of these dates—the accession of Richard I.—is still the well-known limit of legal memory. Beyond that all is a blank obscurity of time as to which the memory of man runneth not. In Henry VII.'s reign a fine with proclamations was made for certain tenures a bar after the short period of five years. In the 32nd year of Henry VIII. the "profitable and necessary statute" (as it is called by Lord Coke) to which we have before referred, fixed periods of 60, 50, and 30 years for the limitation of actions in lieu of the irregular suspensions of the Charter which had previously come in like a *Deus ex machina* for the relief of disquieted holders. The statute of Henry VIII. referred to land alone, for it is in comparatively modern days that interests not concerned with land had much value in the eyes of the Legislature. A statute of James I. extended the law of limitations to personal actions, fixing six years as the ordinary limit for actions but four years for actions for assault and two for slander. For criminal indictments, with the exception of certain informations and minor acts of treason, no limitation is provided. The offender may be doggedly tracked till he has expiated his crime by punishment. The new law refers to nothing but to land, and leaves unaffected the 20 years which must elapse before actions which arise out of deeds or statutes become extinguished. Thus, perhaps, for the first time in its history in England, a right to land is equipped with bristling powers of maintaining itself than a money claim may be, such as, for instance, the liability of a contributory for calls upon the winding-up of a company under the Act of 1862. It is true that what the old owner of land loses the new owner of land gains, and all landlords still retain that exceptional and drastic method of redress which they have by seizing in distraint the chattels they may find, other than lodgers' goods, upon the premises of their debtor. Novelists and dramatists will, perhaps, be the greatest sufferers by the change in the

**Aw.** The abolition of duelling and gambling-tables has increased the hardship of their task, and now their lost heirs will have to harken back to England eight years sooner than of old, unless, indeed, fraud has been committed and the land has not yet passed into the hands of *bona fide* purchasers unacquainted with the fraud. Concealed fraud will still permit the 12 years' limit to be disregarded, except against innocent purchasers, as the longer limit of 20 years was, in fact, put aside in the romantic case of "*Vane v. Vane*."

The new law will often be spoken of as altering the time in which land may be acquired by prescription. And, although this mode of expression disregards a technical distinction which English lawyers make in the use of the term "prescription," applying it as they do to incorporeal rights, such as a claim to ancient lights or a franchise of treasure-trove, it defines the effect of the law with approximate correctness according to common modes of speech. The law of limitation as to land is much more effectual than the law of limitation as to personality. It not only bars the remedy but it extinguishes the right; and it is therefore not without justice that the period of limitation for land will still be twice as long as that allowed for ordinary money claims. The third section of the Act 3 and 4 William IV., cap. 42, which fixes 20 years as the limit for a large class of actions, not for land, but for moneys arising out of land, and reserved by deed, will still have to be considered. Guarded by such reservations as we have indicated, but have not space to discuss at length, the new law is, it must be confessed, not a revolutionary one. Its benefits to landowners in general must be set off against the injustice it may occasionally work to individual members of the class.—*Times*.

## THE SO-CALLED TYPHOID FEVER OF SWINE.

Mr. George Fleming, F.R.C.V.S., and editor of the *Veterinary Journal*, writes to the *Times* :—

Dr. Vacher has done good service in calling attention in the *Times* to the serious mistake made in the Privy Council Order with regard to what is therein designated "typhoid fever of swine (otherwise called soldier disease, or red disease)." For red soldier, soldier disease, and red disease are names popularly given to every morbid or deranged condition of the pig, in which there is more or less redness of the skin. Thus, in anthrax fever, measles, or rubella, erysipelas, and a number of rare diseases, as well as in asphyxia and heat apoplexy, we have this discoloration, and the above designations are generally applied to them indiscriminately, as if they were all one malady and the cutaneous tint was its characteristic symptom.

So that under this Order of Council pigs suffering from any of the affections or conditions just named will, in all likelihood, be condemned as the subjects of typhoid fever, and this may occasion great and quite unnecessary inconvenience, hardship, and loss. Besides, as Dr. Vacher correctly points out, all pigs not "red soldiers" will be adjudged innocent of typhoid. In the latter malady it is well known to veterinary pathologists that redness of the skin is far from being a constant symptom. Its absence, therefore, would not warrant any one asserting that a pig was free from the disease.

But another very grave error perpetrated in the Order and not alluded to by your correspondent, is that with reference to the name given to the malady in question. Well-informed comparative pathologists are cognisant of the fact that the disease is not typhoid fever, and that, pathologically and clinically, it entirely differs from that affection in the human species, the only resemblance between them being the presence of ulcers in the intestine of man and the pig. To give the disease this name is not only a mistake, pathologically speaking but it is perpetuating an error which is eminently misleading to sanitarians and others, and may do much in maintaining and extending the scourge itself. The typhoid fever of mankind and this porcine plague are as different in their modes of propagation or transmission as they are in their anatomy and pathology. The human disease is neither infectious nor contagious in the ordinary acceptation of these terms, whereas the swine fever is extremely so. Indeed, its virulence and powers of infection are as marked as in the cattle plague. Association with an infected pig for only a few minutes will transmit the virus to a herd, and that herd, driven to a fair, may infect all the swine in a county.

It is somewhat strange that the Veterinary Department of the Privy Council should have lent itself to the continuance of such a serious mistake in adopting a misleading and technical name for the disorder, seeing that in one of the recent reports of the Medical Officer of the Council there is a more excellent paper on the subject from the pen of Dr. Klein, F.R.S., in which this error is exposed, and, seeing, also, that the Council had already wisely abstained from committing itself in this direction in dealing with the few contagious diseases of animals included in its list, giving them only such popular names as serve to specify them—cattle plague, foot-and-mouth disease, glanders, &c.

A far better and safer name for the affection than that given to it in this instance by the Privy Council is swine plague, for it is as distinctly a disease peculiar to the pig as glanders is to solipeds, cattle plague or rinderpest to the bovine species, or typhoid fever to our own species. A plague it undoubtedly is, for it is the most terribly destructive disorder to which pigs are liable; and if allowed to spread unchecked, there is reason to believe it would lead to the almost total extinction of these useful animals. It has for years caused heavy losses in this country; but these appear to be trifling when compared with those sustained by the United States of America, where its ravages annually are something appalling.

By the way, I am not aware that any precautions are adopted with regard to the introduction of this most fatal and destructive disease from the United States, which now send large numbers of pigs to us. Owing to the absence of veterinary sanitary measures in America, swine plague (hog cholera or intestinal fever it is termed there) prevails widely and unchecked. So that this country, in its unrestricted and unguarded dealings with the United States, is exposed to importation of the contagious diseases prevalent there, and especially to this swine plague, as well as the contagious pleuro-pneumonia of cattle—a pest becoming well known to the Americans. Would it not be advisable for the Privy Council, in correcting the mistake with respect to the designation of the pig disease, to consider in time whether it and the lung plague are not worthy of some attention at those ports of ours which admit animals from the other side of the Atlantic? Perhaps, also, if the United States Government received a hint that we were exposed to considerable risk in our animal traffic with it, and that if this traffic is to continue as if it were an uninfected country it should adopt measures to free itself from infection, we might be spared much trouble and loss, and the trade which is so advantageous to it at present would stand a chance of remaining as unimpeded as it now is.

**A PRIVILEGED BUG.**—Most of us have heard of Beetle worship and how in old Egyptian days the creature was bowed down to as a god. To-day, however, we hear of live beetles as articles of the toilette. A well-known lady, not an Englishwoman, but an American, who is to be met at all sorts of *reunions* in the West-end of London, attracts the attention, especially of her own sex, by wearing a beetle attached to her dress, generally to her shoulder, by a gold chain. This "bug," as it would be called across the Atlantic, is about the size of a filbert, and shines with prismatic colours. Round its "waist" is a slender gold thread to which the chain that confines it to its wear is attached. The beetle seems quite at home, wanders about as far as its tether will permit, and is occasionally to be seen entangled in its mistress's hair. It is said that the beetle which leads this strange life has been for eight months without food. What are the women coming to? What will they not do for a little novelty or excitement? We shall next hear that they use snakes as bracelets and necklaces, or that they wear live cockatoos in their classic braids. Like that easy-going pet Herrick, we have only to submit and put up with their vagaries, even when they take the form of beetles.

"Be she bald, or does she wear  
Locks incur'd of other hair;  
I shall find enchantment there.

Be she whole, or be she rent,  
So my fancy be content,  
She's to me most excellent.

Be she fat, or be she lean;  
Be she sluttish, be she clean;  
I'm a man for every scene."

—*Lincoln Cuckoo*

## FARMING IN PENNSYLVANIA.

The *Gloucester Chronicle* recently published the following contribution from a correspondent:—

I received not along ago a letter from a young Gloucestershire farmer, asking me to give him a description of average American farming. This would be a difficult task were the methods employed vary with almost every State, and one I feel incompetent to undertake. I will, however, with your permission, give him the result of my observations relative to farmers and farming in that part of Eastern Pennsylvania which I have just left. The population there is almost entirely composed of Pennsylvanian Dutch, who talk a language utterly unintelligible to any but themselves—a mixture of English and low Dutch, it appears “double Dutch” to those who attempt to master it. This section of the United States was peopled by the Dutch previous to its colonisation by William Penn (after whom the State is named) in 1680, and the soil is still in the possession of their descendants. A Dutchman is proverbially stolid, but the average Pennsylvanian Dutch farmer is a compound of stolidity, prejudice, and penuriousness. His land, like himself, remains so far unimproved by time and the rapid marches of civilisation. With impenetrable stupidity he neglects his interests by refusing to recognise or adopt any improved methods of culture, or to replace his scrubby and unprofitable herds by those which would be a source of gain to him. Still his way of doing business is methodical, and to my mind pharisaical. Pay him a visit at any time of the year, and you will find the interior of his house painted white with green facings, everything else being glaringly white with lime-wash. On the whitened pales of his fence hang, when not required, the red earthenware milkpots. Inside his domicile the parlour is neat and clean, with that peculiar musty odour suggestive of closed doors, windows, and shutters, as well as of sparing use. The kitchen, redolent of sour-kraut and burnt rye cakes, is scantily furnished, but free from dirt; indeed, a want of cleanliness in household matters is not a failing of the Dutch. But come to the home barn. Two horses are discovered therein, never more, rarely less. They strike you as much too light for farm-work, but they do it, nevertheless. Bedding is dispensed with, unless corn-stalks—bigger than bean-poles, and too hard and coarse for the cattle to eat—can be so called. In summer pastured on the roadside after nightfall, and in winter undergoing semi-starvation on dried weeds and rank grass (also from the highway), no wonder the animals before you present a wretched appearance. The leaves on the corn-stalks form the principal food of the three or four cows you see huddled in yonder shed during the winter months; for the remainder of the year they, too, have to seek a living anywhere but on the farm—in a neighbour's pasture or cornfield if they think fit. The pigs—well. I cannot really say upon what they do subsist: it has always puzzled me. I never yet saw a Dutchman's pig fat. Visit the same pig after an interval of six months and you will find him no bigger; his sides, perhaps, a trifle flatter, his back rather more arched, and not a whit better fitted for the pork-barrel than he was when you saw him before. The poultry and the dog show unmistakable signs of leading the hard life popularly supposed to be the lot of the latter. Salt pork, rye-bread, and sour-kraut supply the means whereby the Dutchman and his family eke out their monotonous existence. Everything that is saleable, or rather that can be palmed off upon evading customers is marketed. Grain and straw, hay and potatoes (the very small ones go to swell the family ration), eggs and butter, apples and cherries—all are converted into dollars and cents. Half a day is often spent in hawking ten cents' worth of windfall apples in the nearest town; and your genuine Pennsylvanian Dutchman will remain in town haggling a whole day if he thinks he will return richer at night by even a solitary cent. At the proper season his children are sent to scour the country for blackberries, which are then dried and in the winter carried to the store, together with dried apples and cherries, to be traded for groceries. Nothing that can be traded for, or worked out by labour, is ever bought. Now for his land—robbed systematically year after year—and his operations thereon. He has his household well asur by half-past three in summer and by five in winter. The horses and cows are hunted up, and the latter milked. Breakfast is bolted (I cannot say eaten) at five, dinner at

eleven, and supper at four o'clock, the whole three meals rarely occupying more than half an hour, or ten minutes each. Supposing it to be spring, ploughing is begun shortly after five, and continued until milking-time in the evening—about seven o'clock. Such ploughing! Furrows fifteen or sixteen inches wide and only half-turned over. Two acres per diem is rather under than over the average quantity ploughed. Sometimes the harrows are then applied, but oftener not, after which the wheat, rye, or oats (seldom grown) are sown broadcast and covered with the harrows. In planting Indian corn a marker, with teeth three feet six inches apart and driven by a horse, is used. With this the field is marked out in squares. The corn carried by the droppers in bags tied in front of them, after being deposited in the corners of the squares—three or four kernels in a square—is covered with the hoe each dropper carries with him or her. Potatoes are both put in and harvested with the plough, sometimes cultivated, but rarely hoed. One or two applications of the cultivator to the corn and the spring operations of the Pennsylvanian Dutch farmer are complete. Haying and harvesting are got through with as much despatch as is possible without the assistance of hired help—an extreme never resorted to if it can by any means be avoided. Even more intelligent farmers in other parts will run the risk of having their crops injured rather than incur a slight additional expense in harvesting them properly. I recollect an instance in New York State where a neighbour of mine had fourteen acres of wheat—this cereal is not much grown just in that section—which he was anxious to harvest as economically as he could, since he did not consider it a very remunerative crop. Reaping-machines at that time (five years ago) were not generally self-rakers and deliverers, a man with a rake having to sit upon the machine to do that part of the work, and the binders having to keep pace with the reaper to allow it to proceed without stopping. This involved a staff of six or seven men. My neighbour heard that one of the improved machines was for hire in an adjoining village, and immediately rushed to secure it. His idea was to have his wheat cut and then to bind it himself at his leisure to save expense. The reaper came and departed, after making good work; but close upon it came Jupiter Pluvius, who did not depart until he had made some very bad work amongst the unbound grain. Two weeks elapsed before the whole of it was bound and set up. My friend suffered in pocket I know, and I have reason to believe he suffered in spirit, for that crop was never afterward alluded to by him, and the following season wheat was not to be found in his fields. But to return. As soon as the Indian corn is cut in September your Pennsylvanian Dutch farmer thinks he has done his duty for the year, and proceeds to take his ease. He treats with amusing contempt any suggestions as to autumn-ploughing, killing weeds, repairing fences, ditches, draining, or getting firewood for the winter. Any sarcastic allusion to the diminutiveness of his manure-pile would be entirely thrown away, and he would no more assent to the proposition that he is not one of the most enlightened farmers in the United States than he would to the one that, by feeding his stock with more liberal and richer rations, the quantity and value of his manure, and consequently the fertility of his land, would be increased. There are hundreds, I may say thousands, of farms in America at the present day where the horse and cattle-barns are purposely built on the brink of creeks and rivers, with doors opening thereon, so that the manure may be shovelled out and carried away by the stream. The Dutchman's grain, hay, &c., are generally marketed piecemeal, and this constitutes his sole occupation until the following April, the “chores” (feeding and cleaning out stock) night and morning, and the chopping a daily supply of firewood falling to the share of his family. His time is spent in dozing over his own stove, or lounging over those in the store and tavern. Though a strict Lutheran, he rarely attends a place of worship. A victim to superstition, he will not cut hay, or reap, or undertake any enterprise on a Friday, and he is greatly exercised for some time previous to July 2nd or 3rd (I forget which of these two dates) as to whether rain will fall on that day when “Black Maria crosses the mountain.” In the event of its doing so, he tells you that a steady downpour of six weeks may be expected, as well as a total failure of the crops. I am in the dark as to the origin of the legend. A weekly perusal of his county paper, full of political vulgarities and bad grammar, satisfies his literary wants. The standard agricultural journals he abhors, as being expounds

and upholders of book-farming—an institution he is never tired of railing at. As a rule he is sober, not because he likes lager beer or whiskey less, but because he loves his money-bags more. Altogether I consider him, in his present state, a rather unlikely subject to contribute much towards the advancement of agriculture, or anything else, in America. He is a "citizen" of the United States, however, and as eligible for the Presidency as the smartest Yankee. His children are now being educated in American free schools, where Dutch is tabooed, so that it seems to be only a question of time as to when the broad acres of these Dutch settlements shall be restored, by the intelligent culture of improved American Dutch citizens, to their former fertility.

J. H. C.

## SAMUEL DOWNES AND CO'S ANNUAL CIRCULAR.

**NITRATE OF SODA.**—The market has been very inactive and declining during the last eight months, and closes dull at 12s. 9d. for the best quality, *i.e.*, five refraction, which means that a given mark does contain more than five per cent. of impurity; of float cargoes the most recent sale was a cargo, 900 tons, due, at 12s. 10½d. for the U. K. The recent inactive demand is to be attributed to the dulness in the chemical trade, the tight money market, and the pecuniary sufferings of the large buyers of the Scottish and other ports. The price at the same time of last year on the spot was 15s., against 12s. 9d., and the stock on the 31st ultimo was 160,000, against 150,000 in 1877, and 401,000 bags in 1876. With the extreme depression in all branches of commerce, any important advance in prices is not expected to rule for this or any other fertilizer notwithstanding that the attitude of the Peruvian Government still continues most hostile towards British agriculturists, who are, however, not less dependant on Peru for their supply of nitrate owing to the increasing production in Chili, whence the export was for the first nine months of last year 35,000, against 6,000 tons last year; the export from Peru we estimate for the past year at 245,000, against 203,000 tons in 1877. These facts present welcome features to consumers. The values of float cargoes of River Plate bone ash have been effected by the pecuniary difficulties in Scotland, and the closing price is £8 7s. 6d. per ton on 70 base. American fish manure was in great request last spring. To-day holders ask for "dried scrap" with 9 to 10 of ammonia, 14s. per unit of ammonia, and 18d. per unit for phosphate of lime.

**GUANO, &c.**—A report from one of the British Consuls in Peru has been issued by the Board of Trade. "There has been, he alleges, a great falling off in the exports within the last year, arising partly from decreased demand, &c., and also from the agriculturists finding the quality so unequal. The Guano, he adds, in the Southern deposits, is much mixed with stones, and that there is but little left of the fine quality for which the Chincha Islands were celebrated." It may be asked are there not other natural and artificial fertilizers which are more profitable to the agriculturist?

**SUPERPHOSPHATE OF LIME.**—The demand for this article was not equal to the expectations of producers. In the ensuing spring we anticipate that there will be an average consumption, for without doubt it is to be preferred as a top dressing to grass pastures on most soils to the stony guano from Peru, at the prices demanded for each. A report was recently presented to the Aberdeenshire Agricultural Association of experiments which gives some startling information. The results showed that practical agriculturists need not be as whether the superphosphate was of animal or mineral origin. Also that soluble phosphate is not more than 10 to 15 per cent. superior to insoluble. These inferences are so remarkable that many readers will question their accuracy, and it is to be desired that similar experiments should be repeated in other counties in the ensuing spring, to test the soundness of them. About twelve months since a remonstrance was addressed to a Metropolitan newspaper that the quotations in our weekly circular—*viz.*, £3 5s. to £3 7s. 6d. for 25 to 26 soluble, and £4 12s. 6d. to £4 15s. for 34 to 35 soluble, in bulk, were *thirty per cent. below* the market prices. Now we renew our offer of last season, and we are prepared to sell 7,000 tons at a price to be learned on application, but not to exceed

the foregoing prices, to consumers, for special delivery at any time the buyer requires in the ensuing spring. No contract to be more than for 100 tons, nor less than 5 tons. Our object being not to confine the advantages to the few, but to diffuse them among the many, and to cut down the extortionate demands of dealers.

**OILCAKES.**—Of decorticated cotton from the United States the import was 344,000 bags, against 267,000 in 1877. At the beginning of the year the value of the best quality was £7 15s. to £8, in the summer it touched £8 5s., and to-day it is £6 12s. 6d. to £6 15s. The decline is to be ascribed to an abundant supply, to the low values of maize, &c., and the unusually heavy crop of hay. A greater proportion of inferior has been received this year than usual, and the crushers must be more careful and improve the quality. It may be asked what constitutes a superior quality? As remarked in a former circular, we attach but little importance to colour, the important points are the quantities of oil and flesh-forming materials, effectual decortication of the seed, sweetness and regularity of the quality. A recent instance was brought before us for an expression of opinion; a cargo of American was delivered in the North of Europe, it contained 18 per cent. of oil and 42 of flesh-forming materials, but the receiver did not like it because it was rather dark coloured. Now, we have no hesitation in saying that the above analysis represents the maximum degree of excellence, in brief, so superior a quality is seldom imported into any port. This is the most valuable feeding stuff imported, and by the liberal use of it the English graziers can successfully compete with the American, but the great majority of the former are, we regret to write, inexorably ignorant of its merits.—Of linseed cake the total import from all quarters was equal to 186,000 bags, against 170,000 bags in 1877. Prime linseed was worth £10 at the beginning of the year, now it is £9 10s. to £8 15s. per ton.—Decorticated cotton cake is gradually displacing linseed, and, as we remarked ten or twelve years since, the day is not far distant when linseed will not rule more than 20s. per ton higher than the other; in fact, they ought to be at identical values.

**LINSEED.**—At the beginning of last year the price of Bombay was 55s., and it closes at 48s. 6d., the year was an unfavourable one to the importer and the crusher.—Afloat from India to Great Britain there are 215,700 against 442,000 quarters at the same period last year.—The CLOVERSEED market is very quiet. Holders ask 38s. to 40s. for fair Western.—The Albany, Liverpool, January 1st, 1879.

**A NATURAL DEDUCTION.**—Here is a story of "Sylvanus Urban's," which is worth reproducing; "A lady of fashion with a pug-dog and a husband entered the train at Paddington the other day. There were in the carriage but two persons, a well-known professor and his wife; yet the lady of fashion coveted, not indred his chair, but his seat. "I wish to sit by the window, sir," she said imperiously, and he had to move accordingly. "No, sir, that won't do," she said, as he meekly took the next place; "I can't have a stranger sitting close to me. My husband must sit where you are." Again the professor moved; but his wife fired up and protested. "That lady is too exacting," she said aloud; "you should not have hamoured her." "What does it matter, my dear," he replied, "for such a very little way! She must be getting out at the next station." Now the next station was Hanwell.

**INSULT TO INJURY.**—A thief in Chestsfield, who lately robbed the hen-roost of Mr. Britt, landlord of the Horns pub house, in Derby-road, afterwards wrote him the following letter:—"Derby-lane, Chestsfield, 25 78 Mr. Britt Sir It is with Great pleasure I write to you but the fowls were so good and Tender that I could not refrain asking you whether Chickens would soon be ready as work is very Bad and We Must have something to Eat. Mr. Britt I must not forget to tell you that the Black hen Was very tough We could neither roast nor boil it it was a disappointment as I had ask a friend to come to dinner and with Pulling at the old Black hen he Looened all his Front teeth the cock was very good and tender I should not written this to you but I hear that you had Promised to give 4 pounds of bacon I will call for it But I am afraid you would not be true to your Promise I am yours Truly FOWL BROTH."—*Daily Chronicle.*



## DE RE RUSTICA.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—Called by my fellow-countrymen to the mission of expounding to the people the principles of Free Trade, and having spent the best years of a laborious life in the study and public advocacy of open ports and untaxed bread, I am yet the very last man who would maintain that the question is without qualification and complexity. It is not a mere thesis in political economy. It is, in its largest sense, a social and moral problem of the highest national significance. After the experience of thirty years of the free admission of food, I really do not know of any public exponent of a policy of its re-taxation. Farmers are indeed indirectly invited to help the resumption of a system of reciprocity, but it is nowhere suggested that bread and meat should be among the protected articles. Nay, nobody goes even so far as to demand a return to Protection. All that anti-free-traders ask is that a tax should be laid on the imports from nations which tax *our* exports, and it becomes very necessary to warn agriculturists not to be drawn away by this red-herring. All foreign states are ready to admit British farm produce duty-free, a privilege of not the smallest advantage to producers who have none to export, having a better market at their own doors for all they can grow. Reciprocity to our tenantry means simply taxes levied on them to support home manufacturers, who will pay no more to them for their beef and bread than to the foreigner, but will exact a larger price than the foreigner charges. This is the reciprocity all on one side of which the American farmers complain now. They say to the manufacturers, You give us no more than we get from John Bull; why should we pay you more than we give to him? Since you can give us no better price, why should we give a better to you? Corn and meat can never be the subject of reciprocity, because every region of the earth produces them cheaper than we, and the country of their origin can never be so identified as to shut out the produce of prohibited states under the cloak of those that are privileged. What protection would it extend to the British tenantry to tax the grain of Russia or the beef of America if there be fifty other states through whose reciprocity of fiscal duties these commodities could be as cheaply poured in on our markets? But, as I have said, free trade has its moral and social as well as its economical aspects, and, as affecting the soil of a country and its cultivators, these considerations are of infinite gravity. We do not ask if our army and navy, if our schoolmasters and churches, even if our lawyers will *pay*. Begin at Stratford and go right on to Brentford-end. There are shops on both sides all the way of mere retail distributors, one-tenth of whom could serve the community of consumers quite as effectually, at a saving of the rents, taxes, profits, cost of living of all the rest. The greengrocers levy upon vegetables quite five times what they pay to the market gardeners. Hard political economy would sweep away every superfluous distributor—exchange of coin for commodity can be effected cheaper. The fact is there is a sort of indirect communism pervading civilised society that deals out its superfluous wealth through ten thousand devices, and makes up the complex mechanism of a refined nation by endless devices of mutual inter-dependence and infinite reciprocities of custom. Every consumer is a producer. If the butcher taxes the baker, the baker in turn puts a countervailing adequate profit upon the loaf, and all, becoming mutual customers, make up the manifold varieties of social class. But for these complex arrangements there would be no occupation or work for vast masses of the people. A middle-class to a great extent would disappear, capital would become an inexchangeable drug, and

there would be left but leviathan producers with their dependent wage receivers; while the vast mass of consumers who live by distribution, and the ministers to the wants of distributors, would be deleted from the economy of social life. Money was made for man, not man for money. Without law, concerted action, methodical convention, the process by which accumulated wealth is distributed has insensibly grown up and diffused itself, and thus the instincts incident to the natural history of human society have built up the various orders into which peoples are classified. Were "cash the sole nexus of society," the multiplication table would suggest a more economical arrangement of mankind. But, after all, the way to make wealth itself is to make *men*, not mere economical machines of production—to call into being those vast and varied wants, classes, modes of life and being, which give to the whole the chances of giving to nations the services of their best and ablest.

Let there be no mistake. Our food must be left entirely untaxed, but our agriculture must on no condition whatever be suffered to decay. A tenantry, a squirearchy, a peasantry are utterly indispensable to the health and strength of a nation. They are the backbone of its moral and physical stamina. At whatever cost we must plough and sow and mow and reap. To think of England without its farms and whistling ploughboys, and that all because agriculture can be done cheaper elsewhere, we are to blot out our meads and fields, and relegate all to moor, common, heath, and jungle. I do not ask where would be the customers of the manufacturer, the miner and the merchant, the farrier, saddler, and the wheelwright—the local and imperial revenue—the order of distributors—if we thought only of an arithmetical political economy. To let our land go out of cultivation is to commit national suicide; to neglect vigorous and persistent reclamation in the face of a growing population is to my sense a pretermission of the clearest duty of self-defence and independence. There are millions of acres of quaking bog, hungry heath, bare common, swamp, fen, sea board clamouring for redemption to the spade and plough. Self subsistence, a bold peasantry, are the "cheap defence of nations." Even if we could rely upon the foreigner for the supply of our daily food, we could not sustain our place as a nation without the classes that produced it, without the breed of men and the robust athletic habits which recruit our life with their intrepid vitality. Even if food raising were a bad economical speculation, it would be as well worth the country's while to maintain a peasantry as an army and a navy.

But is there really any incompatibility between free trade and the pursuit of domestic agriculture? They have stood side by side for thirty years. It is said, but not, I think, with much truth, that rents have risen with open ports. That is a really a flat contradiction to the theory of agricultural decay. The consumable commodities which the wages of the peasant buy, have by the abolition of duties, been greatly reduced in price—"the loaf," sugar, tea, clothing, the press—all *real* necessities. Wages have risen 50 per cent. These are not symptoms of a perishing interest. If our harvests have for four consecutive seasons been exceptionally bad, the years of lean kine have probably passed away, and the years of plenty are likely to come back, while our full handed neighbours will perhaps now have their time of death. We must not forget that the distress of the farm interest was quite as great and as regularly periodical in the days of the sliding scale. Your contemporary of the *Land Agents' Record* has been pleased to represent my position thus:—"Farmers do not make a profit as matters are, they must reduce the wages of their labourers, and grind the profit out of them. If landlords cannot get tenants in any other way, they must for a moment lower their rents, and

raise them of course as soon as they can. The upshot of all this is that landlord, farmer, and labourer, are consciously set to work in a hostile manner, and tug away as hard as they can in their various directions." Now the plain state of the case is that the labourers have been "grinding" exorbitant wages out of the farmers' diminishing profits, exacting 50 per cent. more, as the employer has been receiving 50 per cent. less—extorting, in fact, at least double the amount paid to the peasantry of every other country in Europe, for producing the very same article and selling it in our own markets in competition with the tenantry of Kent and Sussex. It is in vain for vicarious humanity-mongers calmly looking on at the struggles they do not share, to plead that wages are little enough. I have never heard that foreign farmers are better off than ours, or that they can afford to pay their men more than they do. No bottle-conjuring can get a quart out of a pint pot. Their grain is the only source out of which our tenantry can pay their men, and they can pay no more than they get, however it may "grieve" the labourer.

As for the landlords, it is greatly to be desired that, with your justly great authority, you should undertake the collection of the statistics of the average rent of and burdens on the land of the different corn-producing countries of the world; but most especially that reliable returns should be procured of the quantity in bushels per acre raised by our competitors in the culture of cereals and roots. I do not learn that anywhere, even in the most low-rented foreign states, the farmers and peasantry are so well off as they are here. We hear much of fine land in America, sold in fee simple at 4s. per acre; but how vast is the number of migrants from England, Scotland, and Ireland, who regard the offer as worthless. How many native Americans flock from the rent free forest and prairie into the towns. The cost of labour and capital which the settler expends before his section can, with the poorest endowment of homesteads, be brought into a state of cultivation equal to that of an Essex farm, amounts to quite as heavy a rent. It is notorious that the produce of grain per acre on the continent of Europe falls much below that of this country. Do I at all overstate the British averages when I quote 28 bushels for our yield of wheat, 32 for rye, 40 for oats and barley per acre, taking this country through? The Government returns for the province of Ontario give the yield at 18 bushels for wheat, 33 for oats, 18 for rye, 28 for barley, 22 for peas. Here is the most authoritative statement of the *Times* officially reported of the state of production in the United States. "It is obvious, as the *Philadelphia Inquirer* pointed out two years ago, that the power of the older States to produce wheat remuneratively has been greatly lessened, if not wholly lost, by over-cultivation. The average wheat product of even the younger States is but small, that of Illinois being 8, of Iowa a little over 10, and of Wisconsin 13 bushels to the acre, and this wheat is of second quality only. Seeing that the average yield per acre of first quality wheat in Minnesota is 17 bushels, the superiority of that State is incontestable, and hence, to quote the *Inquirer*, it becomes 'a matter for curious thought' how far the United States may yet come to depend for bread upon the grain, not of this State only, but of that area to the north of it also, the whole forming a part of the new North-West, which has been named the 'continental wheat garden.'" Now it takes as much horse-power and wages to plough an acre to produce one bushel as to grow fifty, as much seed, not much less to reap it, and carry, and stack, and thrash it. I do not understand wages to be less in America than here. Add the cost of clearing the land, carrying the grain through long corduroy roads to the railway stations, and shipment to Europe—can it be said

that an English farm which raises double the crop, and finds customers for it at the very door, pays more rent than its far superior advantages entitle its owner to charge? The only surprise is how foreign agriculturists with such scanty returns can at all afford to sell their grain at such prices as have recently prevailed; and it must be a subject of just satisfaction to every Englishman, and of honest pride to our squires and tenantry, that our agriculture, with all its climatic drawbacks and legislative difficulties should so

Get the start of the majestic world,  
And bear the palm alone.

Rent and taxes have to be paid by other cultivators as well as ours, and any difference of rent here is more than made up by the profit of the increase in the produce. It is really difficult to see if Illinois can yield only a quarter of wheat to the acre, Iowa a quarter and two bushels, Wisconsin about a quarter and a half, and the highest culture of Minnesota little over two quarters, they can afford to carry on culture at all, and still more difficult to divine how they or the Californians and Australians, with their high wages, can in addition to the costs of cultivation spare enough for the enormous transport charges for transmission from five to ten thousand miles, and warehousing and commission at Mark Lane, while our farmers, with double average crops and consumers at their very door are unable to compete with them.

By utilising the sewage of our towns and villages, by arterial and local drainage, by the unostentatious application of artificial manures, by freeing barley from malt duty, by a searching reduction of local taxation, and a readjustment of its application by an equitable compromise with the tithe owner, who contributes nothing to the cost of those improvements by which he benefits, and a wiser system of land laws, much relief may be given to culture. Leases with reasonable covenants, and the suppression of game will also remove real grievances. A fair revision of rents is perhaps called for, but above all not only must all the heavy auxiliary charges of the farrier, wheelwright carpenter, saddler, and other artisans who supply the farmer, but the unconscionable exactions of the labourers must be resolutely retrenched. Although much higher prices are not to be looked for (there is little to complain of in barley, straw, the bulk of hay, and roots) larger crops will now come round to the farmer. The reclamation of waste land and of enclosures from the sea should be undertaken by the State as in Holland and other countries; and a searching inquiry into the whole subject of the farming interests should be the earliest task of Parliament.

The publicity you have given to my letters has brought me a shower of correspondents, and with your permission I may answer their inquiries on the subject of covenants, of the land laws, tithe and conveyance, and of a peasant proprietary.

I am, Sir, &c.,

SIDNEY SMITH.

*The Manor, Feltham, Jan. 1st.*

## LANDLORDS AND RENTS.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—It has been a dangerous habit of the people of this country to adopt the Micawber philosophy, of always "hoping that something will turn up." The trick has grown upon us because of the "windfalls"—if one may use the term—to which from time to time we have had the luck to have been the first to serve heir. We have perpetrated such acts of folly as would long since have ruined us, had not chances run in our favour such as we cannot at all expect to emerge just when we stand in need of them. A thirty years' war—with which properly we ought never to have had anything to do—wo

thousand millions of money wasted in the business of mere destruction, monopolies that made us pay to our colonies, in differential protective duties, absolutely more than the full value of all the goods they bought from us—the absorption of a large proportion of our able-bodied labourers in the army and navy—the interruption to our commerce of hostile marine, and the distraction of our people from industry to warlike defence, added to taxes on all the necessities of life; these were

Enough to press a royal merchant down.

And that we survived it all, and grew more prosperous, has led to an habitual sneering at “croakers” who but predicted necessary effects from obvious causes. The truth is, it was James Watt who fought the French war; it was the power-loom and the spinning-jenny that raised us high above the surge that threatened us; it was our canal system, our railway system, our telegraph system which redeemed our enterprise and industry from a taxation, a fiscal economy, and a reckless extravagance of expenditure, public and private, an insane trustfulness in foreign States and alien projectors, that, but for the lottery of luck seeding us prizes, it would not have been possible for us to have surmounted. Doubtless if science, invention, enterprise, can still strike out new paths to production and conveyance, we may continue in that marvellous career, which we cannot sustain by methods which now the whole world has borrowed from, and in some of which—if we are to believe that extraordinary patriot, Mr. Gladstone—others are “passing us at a canter.” But is it the act of provident men to rely for national life upon a perpetuity of prizes in the lottery of States? The power-loom is busy in India; coal is in course of discovery, in abundance as rich; iron ore of as fine quality in every quarter of the globe as in our “tight little island.” Everybody else “strikes ile” as well as we. There is not at present any prospect whatever that our good fortune is henceforth to be exceptional. We have carried our pitcher unbroken to the fountain too long to warrant the hope that it will never meet with a fracture or an upset.

What, then, is the stern conclusion from these premises, but that our pretensions to exceptional treatment must come to an end? We must no longer look for more than “neighbour's fare.” All our high-flown vapouring about frog-eating Frenchmen, foreign serfs, and down-trodden peasantry, must descend to the herd of vulgar realities of actual existence. It is not “what we have been accustomed to,” and “what an Englishman is entitled to look for,” that we are likely any longer to get, but only what we work for, and can produce better than, or at least as well, as those on whom we look down, and whose face we pity. Forty shillings a quarter will give a British farmer no better means to pay his men than anybody else—“If a man will not work neither shall he eat.” In the long run he can eat no more than he works for. The downright fact clearly is, that if a sack of wheat fetches no more in England than in France, the Baltic States, or Russia, the time has come when the grower must cut his coat according to his cloth, or soon he will have no cloth to cut. Has not that crisis arrived with far too many honest and industrious tenants already?

You have quoted the high authority of Mr. C. S. Read for the very patent fact that wages are higher than they were twenty-five years ago by at least 50 per cent. Mr. Gladstone, our greatest financial and fiscal oracle, fully endorses that statement. Now I want to have a plain answer to this question—If the ploughman to whom in the year 1853 the farmer gave 10s. per week now gets 15s., does the wheat which then fetched 60s. per quarter now yield 90s.? Is it not rather absolutely certain that, while the wages have risen 50 per cent. the average of

wheat has fallen 50 per cent.? Then what earthly apology has the man for asking, and what reason has the master for giving, wages higher in the very ratio of the fall in his profits? Is it simply in the hope that “something will turn up?” or because the advance has been demanded? or because “the country” (what a nice impersonal phrase!) looks for it? or because the Press and public opinion (the old bogeys of fools!) have decreed that you wouldn't surely expect a British labourer to live on the lard-soup and grapes of Johnny Crapaud, or the melons and macaroni of the Italian? In any other trade such a sublime contempt of commercial principles would speedily end in the *Gazette*. British gold is no better and will go no farther than metal of the same standard in any other country; indeed, it is the very same coin that pays the foreign corn merchant and the British labourer. How can it be that the English tenant can afford to pay the Essex ploughman more for ploughing an acre at Havering or Braintree than the Frenchman or Italian for the same extent of finer land in the better climate of Languedoc or Lombardy? The crops are all equal in Mark Lane. When labourers conspire, farmers must combine. Men lived five-and-twenty years ago on the wages they then earned—many necessities, especially bread and salt, are untaxed and cheaper now. If tenants mean to keep their heads above water they must resolutely return to the wages of 1853. Why did they submit to a rise unwarranted by any corresponding enhancement in the price of their produce? Too simply they accepted as truth any lie told them of a rise granted by their neighbours, and were played off against each other by “Hodge,” as he put himself up to auction, or “tried on” a strike at haytime or harvest, when he knew he could not be spared. Masters must resolutely set themselves to stand by each other, and maintain their position. If 10s. were enough in 1850 they are no less in 1878.

Mr. Arch, indeed, proposes “a more excellent way.” If peripatetic resolution could solve the quandary, there has been no lack of agricultural unions and motions “carried unanimously.” The land is to be “nationalised”—that is, seized and divided among the ploughmen. Glebe lands and tithes are to be confiscated, and all large estates are to be assumed by the State, to be redistributed to peasant proprietors, and tenants are told to “shear the pigs before they fleece the sheep.” In other words, they are to keep up wages and put down rents—a cry with which it is necessary to reckon. Let us see how the matter stands.

While the farmer looks to realise from five to ten per cent. out of the land, he pays to the owner a return averaging three per cent. Is that too much? I know an answer is returned to this query. It is said the three per cent. is only the profit on a price that should never have been paid. If capitalists choose to give “a fancy price” for the distinction of landowning, that is not to be charged on the commodity, but on the whim of the purchaser. Is it a whim? The fact is, the farmer pays nothing for the land at all. He never thinks it unreasonable that he should be paid by an incoming tenant for unexhausted improvements. Why then should he demur to pay for the permanent improvements owned by the landlord. Of every farthing of rent, and more, the capitalised cost has been spent in labour and wages in bringing the land to the condition in which it is handed over to the incoming lessee. It has been reclaimed from the common or the waste—hedged, ditched, broken up, cleaned, supplied with gates and fencing, drained, furnished with expensive houses, offices, cottages, yards, which all represent highly paid labour; and rent is neither more nor less than the wages of labour capitalised at very low interest. It is too much the habit of renters to regard a landowner as one who is “born with a silver

spoon in his mouth" *fruges com-umere natus*. In fact, he is simply the heir or assignee of the past labour bestowed in rendering the farm fit for present cultivation. The reclaimers of the Bedford Level, of the Fens of Lincoln and Cambridge-shires, and at whose expense all the roads of these counties have been constructed (and most of the bridges), have an extremely poor return, many none at all, on their outlay. The service their capital has done to the nation is inestimable, and there is too apparent a disposition entirely to ignore it. To that admirable patriot, the Duke of Sutherland, a nation's gratitude is deeply due for reclaiming and fertilising a whole county at a cost for which he will never see any but the scantiest return. Farmers are too apt to forget to reckon their house and their buildings in estimating their rent. Here now is a holding of 189 acres. The homestead is valued for assurance at £1,200. The rent is £160. The current percentage at which buildings are reckoned is 6 per cent. on the cost, or £72, which in this case would leave £88, or about 12s. per acre as the interest at 5 per cent. on £12. Now that amount never covered the wages of redeeming that land from the common or the waste, and preparing it for cultivation by the occupying tenant. In such a case, I repeat, the tenant really pays, not rent for the land but a nominal interest on the wages disbursed in improvements to fit the farm for occupation. I do not at all hesitate to say that this outlay is by no means covered by the rent received—and that at the best the business of landowning is about the worst paid of any current speculation. It is not to be assumed that the English is the only farmer who pays rent, or that he really gives more than the superior advantages of his markets, custom, and means of transport warrant. Holland, Belgium, Norway, France, Italy, Spain, and Channel Islands, know what rent means as well as we. Land sales in France report higher figures than in Essex. I see one of 590 acres is rented at £1,725 and another of 8,331 acres let at £3,293. The homesteads everywhere are of a much more modest character than those our owners are called upon to rear; while their carpenters and bricklayers work sixteen hours a week longer than ours, and at little more than half the British artisan's figure for wages. There are no six-roomed cottages for ploughmen on the Continent. Even in Germany the whole family pig in one apartment. I see by the Royal Agricultural Society's Journal that in Norway that domestic arrangement is preferred, even where more accommodation is offered. Your own Journal gives £1,000 as the cost of six cottages on a Kentish farm. This with insurance and repairs represents at 7 per cent. (a smaller return than other capitalists expect for similar property) £70, or a rent of £11 15s. for each labourer. Pray how much does the tenant or ploughman pay for that? My friend, Mr. A. Mackellar, Canadian Minister of Agriculture, sends me his reports, from which I gather that the average yield of wheat in Arcadia is under 20 bus. per acre, oats about 4 qrs., rye 2½, barley 4, peas 3. The United States average is not greater—and the Continental rates scarcely exceeds these figures. Is it no consideration to the British farmer that the instrument of production, the use of which he hires, yields a quarter of wheat per acre more than is raised by his competitor in other quarters of the earth?

These suggestions have occurred to me, however, not for the purpose of deprecating a reduction of rent where it has been too high. Under existing circumstances a lesser rent is preferable to having no tenant. That reduction may help the repeal of the malt tax, enforce greater economy in the national expenditure, and especially compel a vigorous retrenchment in local taxation, which has nearly doubled within a quarter of a century. Why is the farmer to pay for the education of other people's

children, for maintaining city arabs and gutter children in palaces called reformatories, at double the cost which the honest ploughman's wages can spare for his children, for keeping paupers in the union at more than double the allowance which supports families who maintain themselves, and are a burden on nobody. I do not desire to play the part of wisacre. We have all been "living too fast." In every family expenditure has been insensibly stretched out far beyond the sober providence of our fathers. Wives to the wash-tub and daughters to the churn and cheese-press is the cry of some farmers themselves; and I own that I have been surprised how entirely many farmers' wives and daughters have divested themselves of all connection with the distinctive cares of the farm. I must add that the hunting field, the city, or the continental tour, will not look after eye-servants, direct operations that require daily thought and supervision, or be supplied by a bailiff hired to do what the farmer should do for himself.

But above all, I submit I have *proved* that the chief difficulty which it appears to me the tenant has allowed to grow up to an unreasonable abuse is bad work, exorbitantly paid, out of all proportion to profits. It is quite true that this is somewhat attributable to an excessive demand for labour in reckless and ruinous manufacturing, mining, and railway speculation, which has spirited away the peasantry to the towns. But that wild and uncalculating man's has come to an end in its inevitable retribution—labour will flow back to the country, and it must be the business of farmers to meet mutinous conspiracy by loyal co-operation, determined repression, and a resolute recurrence to a scale of wages better proportioned to the profits of the cultivator, and the average pay disbursed by his foreign competitors.

The reclamation of land, the laws of hypothec and distress, the removal of obstructions to smaller holdings, and a peasant proprietary, the consideration of improved methods of husbandry, and of practical legislative help and relief to the end of removing unwise arrangements in the way of cultivation, are subjects which require more extended treatment than your room can spare in the compass of a letter, which perhaps you and your readers may deem already too long.

I am, Sir, &c.,

SIDNEY SMITH.

*The Manor, Feltham, Dec. 9th.*

## THE AGRICULTURAL SITUATION OF 1878-9.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—The retrospect of the past year will long be memorable with farmers as one of disappointed hopes and bewildering suggestions, causing many weak minds to waver in their faith in the principles of Free Trade.

What is the agricultural look out on the advent of the new year? Can the most sanguine writer deduce a hopeful prospect from the evidences of facts surrounding the situation of farming interests? On all sides the review discloses results of gloom and dependency.

The three previous years are generally acknowledged to have been a cycle of bad seasons adverse to husbandry, and leaving a loss to the occupying farmers. The past year raised hopes of recouping—in part, at least—past losses, for with some exceptions in localities hay crops have been abundant pastures luxurious; in wheat and other cereals (with some exception in barley), in root and green crops, especially, potatoes, we have had perhaps a full average all round. But so glutted and depressed are the import markets with large supplies of foreign produce, the farmer finds in attempting sales he must submit to prices that, notwithstanding his increased crops, result in a positively less money receipt than in years of a deficient yield! The growing importations and increasing competition from abroad are seriously depressing farm

produce—in fact, below the cost of production.

American wheat, selling in Liverpool at 35s. to 40s.; foreign malting barley, 30s. to 32s. per qr., supplanting home-grown in the increasing manufacture of porter! Market returns show enormous importations of animal food, with corresponding reductions in prices, though as yet the consumer has not fairly participated in the reduction. Liverpool wholesale prices are:—Best beef, 7d. per lb.; best mutton, 8½; best pork, 6d., in the carcase. Limiting this cursory review of the farmer's position, what are the signs of depression?

Thousands of acres of good farm land are seeking tenants, and who shall say how many hundreds of struggling tenants are wholly or in part unable to meet their rent audits. Some scores of landlords (to their great honour) are remitting 10, 15, and 20 per cent. to their tenantry in practical sympathy with the times. Would to God all would follow their good example. Farmers are reluctantly compelled to economise labour and to reduce wages. Unhappy strikes and disastrous turn outs in some districts are amongst the ominous signs of bad times, the one redeeming feature being that so cheap are the necessities of life the indigent poor shall not perish for want of bread.

Now what about the future. "Hope deferred maketh the heart sick." But Englishmen never say die in despair! Is there no silver lining traceable in the cloudy agricultural horizon? Necessity begets thought and invention, teaching economy and thrift; also arouses inquiry and suggests changes in the economy of farming operations—as, for instance, by unity amongst farmers, which, with landlord co-operation, may be greatly utilised to their joint benefit in various ways, as by costly and labour-saving machinery and implements, by the purchase of tillages and feeding stuffs at the fountain head on lowest cash prices, &c. Local burdens in taxation want adjusting as between owner and occupier, some local rates want being transferred to the Imperial Exchequer, the education rate for one. If England is to be open to receive the free importations from the whole world, her home farming must be free and unfettered, which at present it is not. The farmer has all along been running sadly overweighted in the great free-trade race. All incumbrances must be removed if farming for the future is to hold its own, and capital be encouraged to flow into the operations of husbandry by affording it unquestionable security. The words of the Marquis of Salisbury to the merchants in Manchester some two or three years ago in reference to developing the resources of India by the aid of British capital, were, "Capital, as you well know, will face any difficulties and danger in seeking employment, but there is one thing that frightens it back, and that is any great uncertainty in the conditions under which it is to be employed." These cogent reasons would seem as specially applicable to capital employed in farming. A largely increased production of home produce is an absolute necessity for independence, and to accomplish this capital is a *sine qua non*. Why should not owners and occupiers come together as business men, and so adapt their agreements to the altered circumstances of the times—removing all hindrances to a valid security of tenant-right by an equal law as secures the fee-simple to the owner? A high authority, Lord Derby's opinion, was that the farm produce of England might be doubled, and with a judicious application of capital this view has been largely endorsed. Only let the farming industry of this country be put on a firm base—security and freedom—no longer a sham but a reality—and it is not a vain boast to say British farm produce may yet meet the foreign producer in successful competition on his own shores.

I am, Sir, &c.,

HENRY NIELD.

The Grange Farm, Worsley, Lancashire,  
New Year's eve.

**MISINTERPRETATION.**—Free-Kirk Minister ('o his "Elder") "John, I should like you to intimate that on Monday next I propose paying Pastoral Visits in the High and North streets, in which I also hope to embrace all the servant girls of the congregation in that district. His wife (whom he'd lately married from the South). "You shall do nothing of the kind, Sir! Let me see you dare to—" Goes into hysterics.—*Punch*.

## CANADA AND THE LABOURERS.

Our Canadian correspondent writes:—It is noteworthy that while a Samaritan Government in Ontario, touched with the woes and privations of the "down-trodden" Kentish "serfs," are inviting them to the fatness to be had gratis among the swamps and boulders of the granite wilderness in Muskoka and other "farming" regions of the Province, cultivators in the "front," or old-settled townships, seem to be persistently making exodus from their locations, and going nobody knows whither. A Canadian newspaper, indeed, sometime ago suggested that a premium should be offered for a prize essay indicating the best means for "preventing farmers throwing up their holdings and turning teamsters at two dollars a day!" At the census in 1871, the following counties had diminished in population—East Elgin, North Brant, South Wentworth, North Wentworth, Hatton, Peel, West York, East York, West Durham, East Durham, West Northumberland, Frontenac, South Grenville, North Leeds, Granville, and Glengarry. On these and kindred significant depletions the *Aylmer Times* of January 17, 1872, wrote:—"The census returns have just established the fact that from all old Provinces of the Dominion there is a large emigration, an outflow and absolute loss of our very best blood to the United States or elsewhere. The causes of this exodus must be strong indeed." The *Montreal News* remarked on the same facts:—"The census returns have startled those who indulged in dreams about our increase in population, and have roused inquiries into the causes which force our youth to emigrate."

That farmers in Ontario are still as restless and dissatisfied with their belongings as formerly has just been made patent by the publication of the Assessment Commissioners' returns for the County of York, the population of which, in 1878, was 59,882. At a natural increase of 14 per 1,000 it should in 1878 be about 65,000, quite apart from additions by immigration, which the Government of Ontario claims to have been enormous throughout the Province since 1871. York population is now, however, set down at 56,633, a positive diminution of 3,249 since 1871, and 8,000 less than it should be by natural increase without immigration additions. The county is one of the oldest settled in the Province, and is the seat of Toronto, the commercial and legislative capital. Its area is 547,120 acres, of which the assessors return about 180,000 acres as yet uncleared. Much of this is doubtless in the hands of speculators. As fresh land is cleared every year by the owners, tenants, or immigrants and others who have bought of speculative investors, the assessable value of the land in cultivation of course shows every year a large increase, though the population has diminished. The assessors this year do not give the number of cultivators, so a comparison cannot be made with those of 1871, which were as follows:—

### YORK, 1871.

Occupiers .....	6,321
Being owners .....	4,430
Being tenants .....	1,865
Being employes .....	26
10 acres and under .....	1,426
10 acres to 50 .....	1,313
50 acres to 100 .....	2,233
100 acres to 200 .....	1,152
Over 200 acres .....	195

These figures are instructive and will dispel many dreams. The number of tenants "being employes," twenty-six, may be commended to the attention of Mr. Auberon Herbert, who, in a letter to the *Times*, has the following:—"Independent homes and plots of their own are the only inducements, as I believe, which will keep the English

labourer at home. It is my strong conviction that no wages which the farmer will be able to pay will keep him here, unless he is made happy, comfortable, and, above all, independent in his home." That is, the English labourer will emigrate unless he gets a home and plot of his own. I agree with Mr. Herbert that independent homes and plots for labourers are desirable; I hope in time they may all have them. But Canada is the last place they must look to for that end. How it may be in other colonies I do not know. If it is with them as with the Dominion, the English labourer will certainly have far more prospect of getting them "at home" than as an emigrant. In the whole province of Ontario, in 1871, there were only 706 tenant *employees* out of 172,258 occupiers. In the four Provinces of Ontario, Quebec, Nova Scotia, and New Brunswick there were but 2,119 out of 367,862 occupiers. In 1871, out of 149,460 labourers and mechanics, &c., in Ontario, 62,179 were employed in agriculture. In the four Provinces there were 157,942 labourers at industrial establishments, and 124,922 at agriculture. It will be seen how miserably small is the number of agricultural labourers, whether in Ontario or the Dominion, who have Mr. Auberon Herbert's independent "plot" of ground. As for the independent "home," heaven help any English agricultural labourer who seeks it here! The comparatively few farmers, principally the 200 acre occupiers who employ labour only need it in the busy season of seed time and harvest. During the winter farmers in districts exclusively agricultural have no more work than they can easily do for themselves. Instead of hiring others they often hire out, and one or more sons will go afar to the lumber shanties. The farmer, therefore, usually engages labourers by the season or job, and his first care when harvest is over is to clear himself of all hired help. He cares not, therefore, about "plots" or "independent homes," but boards his temporary hands in his own house, and his poor womankind, wife included, are nearly fagged to death by the cooking and other drudgery thus imposed on them. It is a bad system and leads to many scandals and immoralities; but it exists everywhere. The writer of a pamphlet issued some time ago from the *Kingston (Ontario) News* office said that, having a somewhat accurate knowledge of five townships, containing about 1,800 cultivated farms, he believed he was correct in saying there were not more than thirty-six houses in the district inhabited by hired farm labourers with their families, though two of the townships had been settled sixty years. He adds—Visit any section ten miles square in the north of England or south of Scotland, and the labourers will be found better housed than the farmers in the new townships of Ontario, and as well housed as many in the old. Good ploughmen in the same district get wages in money and in kind equal to the average wages paid in Ontario. In the *Canada Farmer*, June 15, 1872, we read:—"Why is it so difficult to obtain labour on our farms? We believe the fault lies with the farmers. They work their men to the last extremity. And why is it female servants will not stay on farms? We answer without hesitation, because they are too hard worked." Mark, nothing is said about the "scarcity" of labourers of which agents talk so much in England. There is, in fact, no scarcity; but the truth is, farm labour in Canada is mere slavery—no home, no plot—nothing but what Mr. Mantilini calls one "demonition grind" from four a.m. or five a.m. till eight o'clock p.m., if not later, and intense heat and venomous insect pests.

But again. There are no less than 1,865 "tenant" holders in York. In Ontario in 1871 there were 27,340, and in the Dominion 39,583. Instructive fact! Tenant farmers in England are perpetually sneered at by agents and lecturers from Canada for plodding on in miserable "helotry" under grinding feudal lords, when farms of

their own await them here for a comparative bagatelle, or for nothing. The English farmer in turn, may pertinently ask how it is these many thousands of Canadian cultivators grind on under rental and taxes, when any amount of "rich soil" up north, is placed at their disposal by the Government and is to be had for asking. Why don't they take it, or else pull up stakes and "go for" some of those "sweet things" and "rare investments" which are so warmly pressed on the attention of "small capitalists" on your side? Why, too, should nearly 2,800 farmers be living a hand-to-mouth existence in York county on from 10 to 50 acres of land, some of it rented, when 100 miles north they can get "5,000 acres," or 50,000 acres, if they like, of "splendid soil" gratis? Ask the York farmers this, and they will laugh and tell you the assured "fertile" locations in the new grants are "bosh;" that the Ontario Government has not now any land left to bestow in free grants worth having, and that if it had the last thing it would think of would be to give it away.

Mr. Eugene Wells, of Weston Grange, a practical York agriculturist, in a letter to a Toronto paper some time ago, said that though the farmers of his county were generally considered adepts at their business, they have to contend against want of capital, a climate unsuitable for very profitable agriculture, against stones and stumps, and, above all, have to raise hay, oats, and straw, on land which is now run out, and which has in some cases, been cropped for nearly 20 years without any fertiliser being put into it. This terse description is applicable to a large portion of all the older settlements in the Province, and partly explains why so many people forsake farming, and why so many "fine farms," "bargains," etc., are always in the market. Hence we need not be surprised to find the York live stock statistics showing a downward tendency, as follows:—

Animals.	1871.	1877.	1878.
Horses	22,025	21,007	20,992
Cattle	44,504	39,827	30,813
Sheep	53,081	35,534	33,783
Hogs	38,953	18,442	17,587
Totals	158,563	114,810	103,175

On the whole Canadian farms and farm life cannot be said to offer allurements to either farmers or labourers on your side. Agriculture is carried on under many serious drawbacks and discomfitures, not forgetting the horrible condition of most of the roads, and other disadvantages which, depending as they do on climate, must necessarily be permanent. All the towns swarm with people who "have tried a bit of farming," but given it up. Two-thirds of the Ontario farms I dare say are mortgaged, and mortgage interest is worse than "rent." The shocking state of the roads, made and repaired in a lazy muddling way by statute labour, is a terrible drawback on life in Canada. At times they are seas of mud. As no provision is made for pedestrians, as soon as the town or village wooden side-walk ends you have to go through the mire. I tried to get out into the country some weeks ago from Toronto, but three miles distance from the city the slush was "quite too much," and I turned tail. Indeed, an English settler wrote some years ago to the *Canada Farmer* on this very point. "The English agriculturist who comes to Canada must take into account the state of the roads and the state of society, or he will be vastly disappointed; nor must he look for any comfort, as there is none to be had." The only response the editor could make to this was: "We suppose our friend misses his hunting." But that sort of rejoinder is all nonsense. What is life in a rural district without good roads? Look at England, with thirty thousand bicycle riders. Consider the tribute therein given to the splendid

state of the highway. Bicycles would be of little use in this country, as there are no good roads on which to drive them.

In education, dwelling, social position, and surroundings, the Canadian farmer is often little above the migratory labourer to whom, if his means allow, he gives a brief spell of employment in the spring and fall. As regards his occupation, the seasons here are so precarious and short that his life for half the year is one of perpetual drudgery. In fact, the only well-to-do farmers are the children and grandchildren of the first settlers fifty or sixty years back. With regard to the others, half has not been told of their struggles, privations, and difficulties. The poorest labourer in England is far better off than many "landowners" in the Free Grants. Hear what Mr. Clayden says of the Lower Canadian farmers, a description quite as applicable in many cases to those of Ontario: "I found the Canadian farmer, as far as privation, anxiety, and hard work went, to be in a very little better position than the English labourer. He slaved from morning to night, intent only on getting as much out of his land, his men, his family, and himself, as he possibly could. With no notion of slackening work himself, he exacted from those he employed the uttermost amount of time and labour at their disposal, by no means desirous for them to rise from the condition of day labourers to that of small farmer." This last sentence should be well weighed by your Kentish and other labourers. The labourers of England are earnestly invited by philanthropists here to "come upon the land;" but when they come out they discover, when too late, the land is the very place where said philanthropists do not wish or intend they should go.

### FARMING ON A LARGE SCALE.

The *Missouri Republican* gives the following account of some rather extensive farming operations in Minnesota and Dakota.

FARGO, D. T. August 23.—The "Grandin Farm," a household word in the North-west, is barely known in the East, where the stories of its operations in the ears of the few read like the fantastic dreams of Western reporters. After the failure of Jay, Cooke, and Co., the Grandin Brothers, bankers and oil kings of Tidioate, Pa., found on their hands an inconvenient load of Northern Pacific stock, but they quickly discovered a means of converting it into gold.

Their wheat fields in Dakota are perhaps the largest in the world, certainly larger by all odds than any in the United States. Their immense farm of nearly 70,000 acres lies partly in the Red River Valley, 300 miles south of Lake Winnipeg, and partly on the Goose River, 20 miles to the north-west. The portion on the Red, which is designed for grain culture, consists of 37,000 acres, in whose vast extent it may be said there is no waste land. It lies so beautifully that I think it is hardly an exaggeration to say that an uninterrupted furrow might be ploughed around the fifty square miles embraced within its limits. I know there are many traces of this extent of which such a statement would be strictly true.

From this farm they have just harvested 5,000 acres of grain, from which they estimate a yield of 125,000 bushels.

The planting and harvesting of this immense wheat field is a wonder of modern farming, and has attracted this year excursionists from far and near to witness the working of so gigantic an agricultural enterprise.

Through the hospitality of the Messrs. Grandin and their efficient superintendent, I have had the privilege of a minute inspection of their mode of operations. The field work is conducted with a discipline as thorough as that of an army, while the details of the office exhibit a method not surpassed by the best managed manufacturing concerns in the East. It is, in fact, a stupendous grain manufactory, the success of which depends upon the nicest system and the application of the most complete business training. An active business life has well qualified the proprietor to organise and carry on with success interests so extensive.

The price at which grain can be put to market is a proof that under business principles the pursuit of farming can be made to rank with the most remunerative employment of capital, and I would here remark that, though the distance from market seems appalling, the Dakota grain producer can put his bushel of wheat in New York at one-third less cost than the Eastern farmer, which fact is readily susceptible of proof. So perfect is the system on the farm I am describing that as the work goes on the cost of every portion of the same is accurately recorded, and when the last sack of wheat has left the thrasher the Messrs. Grandin know to a cent what it has cost them per bushel to make and market their crop.

Their farm as at present organised (the grain portion of it) is divided into sections of Nos. 1, 2, and 3, each having its farm buildings, consisting of dwelling-house, boarding-house, for the men, granaries, repair shops, and shedding for the numberless machines that are required to plant, cultivate, and gather the immense crops. The head-quarters of the farm are at No. 1, where the superintendent lives, while his lieutenants live at Nos. 2 and 3. The latter are connected by telephone with No. 1, and orders are transmitted instantly to portions of the forces three and five miles distant. No. 1 is prettily situated on the banks of a lake of about one hundred acres area. Flocks of teal and mallard ducks frequent this lake within easy range of the pleasant mansion, while upon the fields all around the beautiful prairie hen has not yet learned to be unsociable.

Besides the building described upon the sections Nos. 2 and 3, No. 1 has the office, where the book-keeper and his assistants are kept constantly employed. Here is also a special building for the various stores, such as are needed by the hands, of which they employ a steady force for the season of about one hundred, which is swelled during harvest and the thrashing season to between two and three hundred. A large room is specially devoted to the duplicate parts of farm machinery, and so nicely are these arranged that when a break occurs in any portion of the vast field the nearest telephone station announcing the fact, a messenger, whose horse stands ready, need have no excuse for not instantly putting his hand on the desired article and galloping off to the spot where the crippled machine, withdrawn from the line, awaits his coming, and where he will find the machinist standing ready to replace the broken part.

At No. 1 also is the steam-mill for grinding feed for horses and men, and so large is the demand that it is kept constantly running. Here are the carpenters' shops, the main store-houses, and numberless auxiliary buildings which such an establishment must require.

The force of this farming is about as follows: Say 20 to 30 "break plows," 125 harrows, 30 to 50 stubble ploughs, 20 to 30 broadcast seeders, 20 to 30 self-binding reapers, 10 steam thrashers.

I have stated about the number of men it requires to perform the work, besides which there are upwards of 150 horses and mules—the breaking ploughs requiring four to each, the harrows two, the stubble ploughs two, the "harvesters" or reapers three.

It is worth a journey of many miles to see a platoon of self-binders attack a fine field of standing grain. Any description would fail to convey an adequate idea of the grandeur of the display. Two weeks ago I rode into the field where seventy-four of these intelligent machines stood ready for the order to move. The drivers were oiling up, the machinists were inspecting the various parts to be assured that all were in order, the watertank man was driving from one thirty group to another with refreshment alike for men and horses. The superintendent sat his horse silently awaiting the completion of preparations. At last the order was given to "field bosses," machinists, and messengers to mount. The drivers took their seats, reins in hands. "Go ahead," cried General McCloskey, and away they swept for a four-mile round, twenty-four clicking harvesters, each carrying a swath of six and a half feet, 156 feet in width, for all (nearly ten rods), in other words, taking from one side of the mile square patch 20 acres at one "through." Eighty acres of standing grain put into sheaf by one round of the field, a force of fifth "shockers" following put it at once into shocks.

These harvesters seem to work with almost human intelligence. The grain is cut and laid in swathes upon a table, which, revolving, elevates it to another table, where, at regular intervals, a revolving iron arm, carrying, apparently between the tips of its fingers, a delicate wire comes up and grasps the bundle about the centre, revolving still through an opening in the table, carries the wire below, where a twister twists it and a cutter cuts it, and the finished sheaf is tossed lightly off six feet from the reaper's side, the inexorable arm moving on and upward for the next bundle. The motion is as easy and regular as the swing of a pendulum, tossing off the bundles at the rate of ten a minute where the grain stands well, twenty-four reapers turning out two hundred and forty bundles a minute.

I have taken the Grandin as my sample, but it is only one of several such, all under the general management of one man, Mr. Oliver Dalrymple, who may be said to be the pioneer of this grand system of farming. Mr. Dalrymple has an interest in the following farms, and the supervision of them all, harvesting this year from the Cheney farm, 4,000 acres; Grandin farm, 5,000 acres; Cass farm, 2,300 acres; Dalrymple, 2,000; an aggregate of 13,000 acres, which, with the estimated yield of twenty-five bushels to the acre, will show a grand total of 325,000 bushels.

I had the pleasure of spending a day with Mr. Dalrymple on the Cheney farm just as he was finishing cutting and was putting his steam thrashers to work. I sat by one for a few minutes while I was on a field of oats. By my timing it put through two sacks a minute, or between four and five bushels. This field would yield about sixty bushels to the acre.

For half an hour I timed a wheat thrasher, and every minute it "ran itself in golden sand" to the amount of two bushels and a peck.

The whole force is at work there will be ten thrashers, and the aggregate stream of wheat from all will be: Twenty bushels a minute, twelve hundred bushels an hour, twelve thousand bushels a day. To cut the immense harvest of thirteen thousand acres Mr. D.'s force was eighty reapers, eighty men (drivers) and two hundred and forty horses, besides a large force of horses, messengers and machinists, who in the middle constantly follow the reapers. The harvest was gathered in ten days and without a drop of rain.

A few days ago a party of excursionists from Eastern and Western cities visited the scene of these harvests, among whom were many newspaper representatives, whose accounts read like romances. The highest colouring they may give will not add one golden tint too much to the splendour of the canvas which lay spread out before them.

## A YEAR'S FOOD IMPORTATION FROM THE UNITED STATES AND CANADA

During the past year the importation of food to this country from the United States and Canada has been conducted on a largely-increased scale particularly as regards live stock. At the close of the third quarter of the year it was expected that the importation of live cattle would very shortly cease, owing to the adverse weather experienced by the steamers during the winter months. Contrary to this conjuncture, however, shipments have been found in the United States and Canada who are willing to risk their cattle across the Atlantic even up to the present time. In many instances steamers have arrived with large numbers of animals on board, the mortality during the passage being very small, while in other cases the death-rate has been very large. In one instance a steamer left the American shore with a valuable consignment of 151 head of cattle, but having encountered very stormy weather, not a single animal was brought to Liverpool, while another lost some 300 sheep and a number of cattle. So great, indeed, are the risks attached to the conveyance of live stock in the winter season—from October to March—that the rates of insurance are almost doubled. Already arrangements have been made for next spring for the shipment of live stock from America and Canada into this country in such numbers, that it is stated in some quarters that the English market will be glutted if they are carried out in their entirety. Several new steamers, forming a line specially intended for the conveyance of live stock from America, have made their first voyages, but the adverse weather has so far prevented them bringing over cattle in large

numbers. It is believed, however, that the contracts entered into by the owners are too extensive to be completed, and it remains to be seen whether this will prove to be the case.

As regards fresh meat, the importation last year has also been exceedingly large, showing a steady increase on previous periods. The termination of 1877 left the demand very good for fresh meat, with very fair prices. Since then, however, the market being, no doubt, influenced by the large influx of live American animals, the price of the fresh meat has declined. The keen competition between the two imports has had the good effect of introducing great improvements, both in the accommodation for live stock in transit, and also for the better preservation of the fresh meat during the voyage. In the latter respect an important saving has been effected by the adoption of an ingenious process for keeping the meat cool without the necessity of using ice. As week by week advances, there is an increase in the arrivals of fresh meat, and when the new process is generally introduced on board the steamers in the spring, a still larger supply may fairly be anticipated. During the quarter ending December 31st there arrived 60,234 quarters of fresh beef, 13,874 carcasses of mutton, 3,052 dead pigs, 3,345 packages of fresh butter, 2,630 tubs of fresh butter, 11,307 live cattle, 26,837 live sheep, 2,049 live pigs, and 18 calves. The following are the figures for the previous quarter, ending September, and show the considerable fluctuations in the imports:—29,513 quarters of fresh beef, 1,427 carcasses of mutton, 23,199 live cattle, 1,894 tubs of fresh butter; live pigs, and 3,245 packages, and 1,894 tubs of fresh butter; while for the preceding six months the totals were:—165,422 quarters of beef, 25,730 carcasses of mutton, 13,268 live cattle, 3,284 sheep, 6,812 pigs, and 200 packages, and 5,967 tubs of fresh butter. The grand total, therefore, for the year is:—255,168 quarters of fresh beef, 41,031 carcasses of mutton, 3,052 carcasses of pigs, 6,791 packages, and 9,500 tubs of fresh butter, 46,704 head of live cattle, 54,378 live sheep, 14,257 live pigs, and 18 live calves. In the course of the Christmas season a large number of turkeys, geese, and ducks were landed at Liverpool, principally from Canada.—*North British Agriculturist*.

## FARM AND DAIRY PRODUCE.

"Importer and Consumer" writes to the *Times*:—"I quite agree with 'A Buel's Farmer' that the general public are not receiving the full benefit of the present low prices of farm and dairy produce, and, if true of English produce, it is to a greater extent true of American provisions imported in enormous and daily increasing quantities to this country. The general public may be surprised to learn that the wholesale prices of American cheese vary from 2d. to 5d. per lb.; of butter from 5d. to 11d.; of bacon from 2½d. to 8½d.; of hams from 3½d. to 5d.; and lard from 3½d. to 4d. per lb. The extreme prices are for qualities equal to English production, and, indeed, frequently sold as such, American cheese being labelled in the shops as 'Cheshire,' the American bacon as 'Wiltshire,' 'Cumberland,' 'Irish,' and 'Home-grown.' Consumers would do well in these hard times to look carefully to the prices they are paying, and, instead of buying the so-called English at extreme rates, to inquire for the American at a reasonable profit (say 1d. per lb. above wholesale prices), and to see that they get it."

**WORKHOUSE FARE.**—A well-to-do Colonist once complained to me that "this ain't like the old country; there ain't no parish." Perhaps at home he was acquainted with Lambeth, where, I read in a local paper, £1,000 worth of soles, at one shilling per pound, were supplied for the use of the workhouse. In St. Saviour's, again, one of the guardians declares such is the waste of bread in the workhouse that hundreds of poor people who were out of employment could be fed with the surplus food at present thrown into the hogs' tank. This dreadful squandering of the ratepayers' money is apparently due to the "rules of the Local Government Board, which require inmates of the infirmary to receive a certain quantity of bread whether it was used or not." Sick people naturally not all having the same appetites, and some having no appetite at all, the surplus is converted into what is officially known as "hogwash"—though I understand it is really hogs' food.—*Echo*.



## THE PROSPECTS OF FARMING.

No. I.

An agricultural retrospect of the past few years, if dealt with by a truthful chronicler, is necessarily gloomy. True history is a record of facts, and if the facts are of a painful character no true historian can give a pleasant account of them. But, in treating of the future, hope comes into play, and, although cheering anticipations must be based on reasonable grounds in order to be accepted by thoughtful people, the uncertainty of the future must always leave a wide margin for hope. We have recently had placed before us the opinion of a very large number of farmers, from all parts of the country, upon the present condition of the agricultural interest, and, with few exceptions, these are of the most depressing character. In very many cases, too, there has been added to the statement of present adversity the fear of something still worse to come. Now, we should be sorry to raise baseless hopes as to the future, or at any rate the immediate future of agriculture in this country, because to do so would be, not only to cause disappointment, but also to enhance distress. It is always best to look misfortune fully in the face, to realise the worst it can do to us, and then to take such measures as are in our power in order to regain what we have lost. It would be rash to assert that we have yet seen the worst of the agricultural depression which now reigns over almost the entire country. Another deficient harvest would probably result in such a general break-down amongst farmers as has not been known in the present generation. Nor is it likely that, apart from any consideration of what next harvest may do for farmers, the full results of past losses have yet become apparent. Many who are holding on, hoping against hope for an escape from ruin, may have to give in before they can reap another crop. On the other hand, a really good harvest would save the majority of those who are now in a precarious condition, at least for the time being, and everyone must hope with more than common earnestness for a favourable time for sowing spring corn and suitable weather to follow.

But the question of the future of farming is one of much wider range than that of the temporary staying-off of a threatened disaster, and the gloomy anticipations to which we have above referred have a much more general significance. There are many who think that the prosperity of British agriculture has reached its climax and will permanently decline. We have not come to any such despairing conclusion, for reasons which we shall on a future occasion state. Still, we have no faith in any speedy restoration of agricultural prosperity, and are strongly of opinion that all the remedies suitable to a time of more or less lengthened adversity should be at once applied. First of all, rents must and will come down. Land is certainly not worth so much to farm as it was ten years ago, and it will consequently bring less in the market. We have never been amongst those who appeal to landlords' generosity, and the remissions of rent that we have heard so

much of lately occasion us pain rather than pleasure. It is, of course, in one sense agreeable to see sympathy for unavoidable misfortune take a tangible form; but the thought that farmers are not in a position to be independent of charity—for it is that and nothing else—is so humiliating that there is no room for any feeling but one of regret. Nor is this all, for it is impossible to ignore the consideration that these gifts to tenants have a tendency to keep up rents. A tenant should only give as much rent for land as he can pay on an average of good and bad seasons. If he gives more than that, and when he falls behind is helped with doles from a charitable landlord, an artificial value is given to land, and a few are saved from serious temporary loss at the permanent cost of a whole class. What is wanted to meet the present emergency is a general reduction of rents—not a few remissions of ten or fifteen per cent off rent actually due, and we put it to landlords as a matter of business expediency, and not at all as one of generous consideration for their tenants, that they should accept a moderate reduction now in order to avoid the great reduction which they may otherwise have to accept hereafter. What they have to consider is a question of probabilities. If they think farmers are likely to tide over these bad times quickly enough to enable them to retain their farms, there is no reason why they should reduce their rents. On the other hand, if they see reason to fear that there will be wide-spread ruin amongst their tenants, then for their own interests purely they should make a small sacrifice in order to prevent a greater one. We all know that when a panic occurs all things affected by it go down below their real value, and if we have a farming panic that result will apply to farms. All that we say then by way of advice to landlords is that, if they have cause to fear such a panic, they should in common prudence take the best means for preventing its occurrence by reducing their rents. We do not say that they should not be influenced by kindly feelings towards their present tenants in taking this course. As a matter of fact such feelings do come constantly into play in the transaction of business, ignored as they may be by the narrowest school of political economists. But we hold it to be utterly unbusiness-like, and, on the whole, unwise to appeal to such feelings. A landlord may say to himself, "I may as well let my old friend keep in his farm at a reduced rent as to let him be ruined first and have to take a lower rent from a stranger afterwards." He may even go further, and accept the lower rent of the present occupier if there is still some doubt whether he might not get the same rent of a new comer; that is, he may give the present tenant the benefit of the doubt. Further yet, a landlord may reduce an old tenant's rent when he knows he could get as much from a stranger. We say a landlord may do these things; but he should not be asked to do them, except so far as they, or any of them, can be represented to

be probably to his own interest to do. He should not be asked to be benevolent, because "business is business," and a man who goes to buy should not beg. It is best on the whole for all that, as a rule, selfish considerations should govern business transactions; though as long as the world lasts, and human hearts are not stones, selfishness even in business will be tempered very generally, and occasionally quite over-ruled, by generosity. Our contemporary, the *Land Agents' Record*, and our correspondent, Mr. Sidney Smith, appear to be somewhat at issue on this point, but we feel sure that both will agree to a great extent with the above statement of the question. But whether from motives of selfish prudence only, or from generosity, or from a mixture of the two, landlords of their own free will agree to a reduction of rents or not, we feel convinced that it will come. It has, indeed, come already as far as the less desirable farms in nearly all parts of the country are concerned, and that it will be general, unless we have a sudden and quite unexpected revival of agricultural prosperity, we have not the slightest doubt. There is not now the scramble for farms which existed a few years back, and unless prospects change greatly there may be a scramble for tenants before we see any return to high rents. Under the present conditions of farming, with corn, meat, cheese, and butter coming in ever-increasing quantities from almost all quarters of the world, it is quite unreasonable to expect rents to keep up. To enable farmers to compete with such rivalry the conditions under which land is held need to be greatly altered. When those conditions have been amended we shall expect to see British agriculture revive, and rents revive with it, and not till then. In any hopeful survey of the future of farming in this country, then, we hold that the first position to maintain is that rents must come down. A fall is necessary to meet the existing emergency, and while people are talking about it—long before landlords are convinced of its necessity—it will come.

But a reduction of rents alone will not restore prosperity to British farmers. It will merely help them to tide over their difficulties, and we only regard it as incidental to a period of adversity. There are other matters of more permanent importance to agricultural success, and these we shall refer to on future occasions.

### THE IRISH LAND QUESTION.

On Monday evening Mr. O'Shaughnessy gave a lecture on the above named subject before the Limerick and Clare Farmers' Club. There was a small attendance. Mr. O'Shaughnessy combated the charge of spoliation, and deprecated the use of intemperate language in stating the demands of the tenantry. It was a many-sided question, he said. The land did not exist for the exclusive benefit of any class. The occupier and the owner had their rights, but to suppose that these were the only classes to be heard would be as great a mistake as it was for the landlord to assert that the rights of the owner were supreme, and that all other rights existed by his consent and were to be determined by his pleasure. The agricultural labourers are entitled to a patient hearing. The artisan has a right to see that the field which supplies him with food is prudently and productively managed. The commercial community has its *locus standi*, and the social instructor, whether priest or philosopher, is entitled to express his views. He confined his aspect of the question to the

landlord's side, and inquired what the effect of security of tenure would be on the lord of the soil. The Ulster tenant enjoyed three rights or advantages. The first, to quote Judge Longfield's words, was that so long as he pays the rent the landlord is expected not to use his legal power of eviction. That was fixity of tenure, and it had given the tenant comfort, independence, and capital. It had created a spirit of enterprise, the parent of northern commerce. To the landlord it had insured prompt payment of the rent and farms in high and constant cultivation. It had brought him into friendly contact with his tenant, and given him such influence as the southern landlord never had when he narrowed his tenants to the poll. The second right was free sale. The tenant was entitled to sell his interest subject to the landlord's approval of the assignee. That was a necessary consequence of continuous occupancy; without it many a bad tenant would be tempted to hold on instead of letting a solvent tenant take his place. The third right touched the raising of rent. It did not deprive the landlord of the power of raising it in proportion to the increased value of the land, subject to the provision that a competitive rent was not to be exacted, and that, to use Judge Longfield's words, the discretion of the landlord should be guided by the same generous feeling which he showed in the original letting. Now, Mr. Butt's proposal rested on the leading principles of fixity of tenure, a valuation of rents, and free sale. The three demands of the South were identical with the three branches of the custom. If the principle of continuous occupation were admitted, he believed there would be little difficulty in selecting a tribunal to fix the rent, but at present there is an undue and uncommercial competition for land, and it should be admitted as a principle guiding the tribunal that the proper rent was not necessarily a competitive rent. The mere prospect of compensation for eviction will not induce a tenant to invest his capital in the land; while, on the other hand, the Irish landlord will not make the improvements which the English owner effects as a matter of course; he even discourages the tenant from effecting them. The land must be improved by some one, otherwise there is a criminal waste of human food and wealth. The whole nation of consumers and not merely the tenants are entitled to demand such security of tenure as will enable the occupier to carry on the business in an efficient and productive manner. Land is tied up in the hands of a few individuals by the laws of primogeniture and settlement. He advocated the abolition of those laws, so that the land might come into the market at its real value, and the cultivator have a chance of purchasing. In Ireland the merchant is not without the natural ambition to become an owner of land, but he must have £5 per cent. upon his purchase, while the Englishman will be satisfied to pay for his glory by so long £2 or £3 per cent. As to peasant proprietors, it was unnecessary to discuss the argument derived from English experience, which was again the experience of all European history. He contrasted the condition of the Irish tenants with the peasant proprietors in France, Belgium, and the Channel Islands, and observed that the Bright clauses of the Land Act, if successfully worked, only touched the fringe of the question. He believed that the main object could only be accomplished by opening the markets of land and enabling the tenant to amass capital for the purchase. Tenant right was the keystone to a peasant proprietary. He thought little would be done by the present Government, unless under the inspiration of Lord Bacon-field, they surprised the country with a good Land Bill, as they gave a Reform Bill to "dish" the Whigs. As to the Liberal party, if they did anything, it would not be from any interest taken in the question by members who sat on the front Opposition benches. The tenants would make their weight felt, not by becoming the dependants of any English party, but by maintaining an independent position in the House of Commons. After the delivery of the lecture, a vote of thanks was passed to Mr. O'Shaughnessy. Some confusion was afterwards created by an observation made by Mr. C. Dawson as to the absence of the Irish members in the House of Commons on a particular occasion. He mentioned the name of Mr. Biggar as the mover of an important Irish question. Mr. Gubbins, in a state of excitement, exclaimed that he would not listen to the name of that man. The Rev. Mr. Dwyer thought Mr. Gubbins was right, and Mr. Lenihan strongly protested against the name of an Obstructionist being introduced at the meeting. Mr. Dawson apologised, and tranquility was restored.

## LANDLORD AND TENANT.

We only now find space for some extracts taken from a letter by "A Land Agent," which recently appeared in the *Land Agents' Record* :—

The relations of landlord and tenant at the present time are peculiarly interesting. Never within living memory have such a number of notices to quit been given by tenant-farmers. Almost as great a panic exists amongst them to get rid of their holdings as there is amongst bank and gas shareholders to sell their stocks; and I am not sure if farmers have not the graver cause thus to act. There can be no doubt that a very serious crisis for both landlords and tenants is upon us, and on the good feeling and kind consideration of the one and the good sense of the other largely depends much of the future prosperity of both. No land agent farmer, or indeed any one at all acquainted with land will deny, that in addition to the competition, from without and within, so ably referred to in your articles, a third and fourth might be added in a succession of four bad seasons running; and in the dearth and inferior quality of the labour of the farm compared with what it was a quarter of a century ago. Add to this again the fact that the last stronghold of the farmer—the monopoly of the supply of fresh meat has not only been attacked but is almost wrested from his grasp, and and there is shown abundant cause for the extraordinary number of farms about to be given up.

The causes I have named, and some others to which I will refer later on, are and have been operating to the detriment of the British farmer for many years, but with the instincts and feelings of Englishmen, who they say never know when they are beaten, he has been hopeful of better seasons and better prices. In both hopes he has been miserably disappointed, and the culminating point appears to have been reached. It is now absolutely necessary that an entire revision of the terms and conditions under which land is held must take place. The chief reforms required are the following :—A very substantial reduction in rents; the introduction of liberal covenants; freedom from game and rabbits, both of which after his landlord has had one day's shooting in a year on a farm should belong absolutely to the tenant; the abolition of gamekeepers; proper buildings; a sufficiency of good comfortable labourers' cottages for each occupancy; freedom of cropping; the right to sell hay, straw, turnips, mangels, or other crops (buying as much manure in place of them as is their manurial value). This will give the farmer the difference between manurial value and the selling price, which in localities near large towns will be very great. In short, an entirely new departure must commence, or landowners will have in a large measure to farm their own estates. Are they prepared to do this? Have they the necessary capital to spare? In nine cases out of ten it would be impossible for them to find it. I shall quite expect to be told they cannot afford to reduce rents, and that they cannot find the means for putting up proper and convenient farm buildings and labourers' cottages, for drainage, &c., &c., or any other permanent improvement. But in view of certain Acts of Parliament, and the companies formed expressly to undertake and execute works of that character, by which the charge for both principal and interest can be spread over a number of years, I shall assume that landlords have the means placed within their grasp of making all necessary permanent improvements on their estates. I would respectfully urge all of them who have not already done so, to look round their estates, along with their agent, and see what can be done towards rectifying matters. Farmers have seen their profits reduced to the vanishing point. Would landlords farming their own lands be in any better condition? It would, therefore, be better for a landlord to reduce his rents, give liberal covenants, sacrifice his game, and discharge his keepers, rather than to lose old tenants and enter upon new risks, without any more prospect of success than now appears. I know this advice will be unpalatable, but it must be taken if landlords wish to avoid greater and unknown evils. I am fully aware that many noblemen and gentlemen have very liberally assisted their tenants by returning to them large percentages at the rent audits; all honour to them I say for their kind consideration; but few

even of these have gone the further step of abolishing restrictive clauses, or giving up the game and rabbits. The readjustment of rents, however, to meet the altered condition of the times, should be a general movement embracing the whole kingdom, should not rest upon individual goodwill, and should be placed at such a figure as would allow for a run of bad seasons and bad prices. I fully believe that with the benefits arising from the abolition of useless and restrictive clauses, the power to keep down the game, and the other matters to which I have alluded, a reduction of six shilling per acre on the lowest rented land and ten shillings on the highest, would enable the British farmer to fight successfully against all competition, and would draw again to the soil that energy and capital which is now being turned into other channels. Farmers at present are not bringing up their sons to follow them in their holdings. They have been for some years losing heavily, and except for the liberality of those who have assisted, perhaps five per cent of their number, have borne the whole brunt of the battle; it is time that those who have profited so largely by the rise in rents which has taken place within the past forty years should bear a fair share of the losses of the past and present time, and no land agent who has the real interest of his employer at heart will counsel other wise. It cannot be to the interests of landlords to lose old tenants, many of whom have been on their estates for generations, and yet is it not the fact that notices involving the severance of such old ties have been largely given this Michaelmas? Timely concessions would have averted some of these notices,—concession that will have to be granted to new tenants in order to obtain them. It adds much to the bitterness of regret every farmer feels at leaving the old homestead to see requests which have been refused to him for years, and which would have enabled him to stay on the farm where he was born, given under pressure of necessity to an entire stranger. As a rule, also, the old tenant would be satisfied with less than is given to the new, and therefore every effort should be made by the agent to avoid changes of tenancy.

Many landlords would prefer making larger reductions in rent to giving up the game, but if they are wise they will not retain such a source of annoyance and heartburning in their midst; if the finding of one day's sport in a year for his landlord is left to the tenant, the landlord might rely upon having a good supply for himself and his friends, and the saving effected in the wages of gamekeepers would help very much to recoup the reduction of the rents. No one but those who have suffered from game and rabbits know the mischief and loss they inflict, or the angry feeling they daily arouse. To say that thousands have been ruined by over-preservation within living memory is to state a simple fact that cannot be denied. Freedom of cropping and the sale of hay, straw, turnips, or other crops, does not mean impoverishment of the land. Under proper restrictions it will largely add to its fertility and condition; there are thousands of farmers who cannot sell any of the crops I have named.

Every inducement should be offered to the farmer by full compensation for all unexhausted manures, for the consumption of cake, &c., used within the two last years of his tenancy, to maintain his holding in the highest condition up to the time of leaving, and so avoid that pernicious system of taking out of the land everything he has put in.

The value of proper buildings, such as covered stack-yards and fold-yards, is very great; yet how very few holdings possess them. The loss manure sustains by drenching rain is well known, yet probably 95 per cent. of fold-yards are open to every shower. Of other buildings the want is not urgent, but of really good, comfortable labourers' cottages there is great dearth.

We see on all sides farms going begging. They are advertised for weeks together without success, and agents are at their wit's end to know what to do. Under such circumstances I have ventured to sketch out some suggestions which will meet the views of farmers, and, if granted, will lead to the withdrawal of many of the notices given. I am sure in the long run no landlord or his agent will regret making sacrifices in order to keep on his estate men of the right stamp, who, once lost, can hardly ever be replaced; or if replaced, only by granting to strangers something more than would have satisfied an old tenant.

## THE WATER SUPPLY IN RURAL DISTRICTS.

At a meeting of the Boroughbridge Agricultural Society held recently, Doctor McCASKIX read a paper on "The Water Supply of Rural Districts." He said that as residents in the rural districts, and as members of an agricultural society, they were deeply concerned in obtaining an abundant and pure supply for themselves and their stock. In this country the question of scarcity was one which, fortunately, had not often to be dealt with; and with our abundant rainfall, if proper measures were adopted to profit by it, this difficulty might almost be obliterated from the list of the many troubles which encompassed the British farmer. The injury to stock during warm weather particularly, or in fact at any time, if the water supply was scanty, was well marked, the loss of condition being rapid and certain. As drought usually occurred during the warm months, when animals ought to be gaining flesh rapidly, the distress and want were most severely felt. An abundant supply was quite as essential to animals for feeding purposes as an abundant supply of food. Cavalry horses had been experimented upon, a certain number being allowed a given amount of food and a limited supply of water. Others, again, received less food and an unlimited supply of water, and the result was that the latter improved in condition, at the close of the experiment having been found to have gained flesh considerably. Where wells could not be depended upon to outlast a droughty season, where fresh sinking was unadvisable, and where relief could only be obtained from a distance, the question arose, Ought not means to be adopted to render the farmer independent of the seasons as regards this a serious necessity? The rainfall was the most certain, and probably the cheapest, available source. To benefit by this directly they must have well-spouted buildings, and a competent reservoir, into which the rain water could be conducted and there stored for use during the droughty season. Mr. B. Denton, C.E., in a pamphlet published in 1885, urged the advisableness of collecting the subsoil water flowing through the drains, thus accomplishing the two objects of drying the land and utilising the water taken out of it. As regards its use for the farmer, there were grave objections on account of the impurities liable to be washed down from the different manures or tillages employed; but where scarcity existed he could quite understand that the subsoil water, which ran to waste during the wet months, might be saved and stored as Mr. Bailey Denton suggested. He (Mr. Bailey Denton) proposed that wells be made at certain intervals where water was likely to be required in case of drought, either for stock or for steam cultivation, into which the drains should empty themselves. Where the fall of the land permitted, ponds might be made on a similar principle, which would involve considerably less expense. Coming to the more serious and important part of the subject—the supply of water for household purposes—he said that the matter of quantity and quality being settled, the whole of a town population enjoyed equal advantages, but where nearly every dwelling had a separate source, the danger of contamination was evidently increased. In the former case the supply was under the control of trained men, and its purity was carefully ascertained by analysis, whereas in the latter, each household having his well under his own charge, was apt to allow impurities to find their way into it. Most country houses had receptacles for rain water, but as stored and collected at present, it was of no use for drinking or cooking purposes. In low lying districts with sandy subsoil, which had for years been undergoing impregnation from the sewage matter, it was exceedingly difficult to obtain a satisfactory supply from wells; or where a solitary house or hamlet required either a new or additional supply, and if deep boring would be required, then the question of the use of rain water became important. Where there were no factories, the quantity of ammoniacal salts and other impurities carried down from the air was infinitesimally small, and with proper care in collecting and storing, rain water might provide a wholesome and abundant supply. The points to be attended to were—1st, to have sufficient spouting on the buildings to ensure quantity; 2nd, the spouting should be carefully and periodically inspected; at some point the pipe leading down to the tank should be accessible, and a protection of wire introduced to prevent animal or vegetable matter being carried down; 3rd, the tank should be of sufficient

size, must be at a considerable depth on for the soil, lined with slate, and carefully covered. He fully expected that the rainfall would become more frequently used for domestic purposes. River water should never be used for cooking or drinking, unless carefully filtered—running streams free from any chance of pollution excepted. As the necessary filtration could only be properly carried out on a large scale and with proper appliances, they did not often have the river supply available in rural districts. The principal supply in the rural districts was from wells. Impurities existing at the fountain head were of very rare occurrence, and they must generally look to the surroundings for the dangers of contamination. The depth from the surface at which water could be obtained varied much, even in the same locality; but as in loose soils a well 80 ft. in depth was calculated to drain 200 ft. in diameter of surface area, they frequently found that within much less than that distance impurities existed. In villages, as a rule, there were two or three wells for public use, their sanitary situation being often sacrificed on the altar of convenience, it being no uncommon arrangement to find a well in close proximity to the main drain. The water from all public wells should be analysed, and even when found pure, if any contaminating medium be dangerously near, a new supply should be procured. The site should be clearly away from all chance of leakage from farmyards, privies, or drains, and if this could only be done by moving the well to a moderate distance, better incur the extra trouble of carriage than run any risk. The wells at many farmhouses had been sunk with the double object of supplying the cattle in the yard and the family in the house. As the manure was allowed to collect for many months in the year, the soil must become saturated with animal matter. The leakage which occurred from foldyards and manure heaps, free from human excrement, although highly objectionable, if in moderate quantity, was not so likely to produce serious results. The dangerous waters were often those apparently clear and sparkling which received contamination from animal matter, which had undergone or was undergoing fermentation. Within the last few years an unsuspected vehicle of infection had manifested itself, milk having been proved to produce several most serious outbreaks of enteric fever.

The dairy utensils at the farm from which the disease proceeded were in all cases found to have been scoured with impure water, the same having been used, in all probability, for adulteration purposes. He wished to direct particular attention to the fact that the water supply to many farmhouses and isolated dwellings in the rural districts was far from satisfactory. In valleys the great desideratum, in his opinion, was to provide a supply from one ascertained pure source—the town plan upon a small scale. The uncertainty as to the amount of boring required in artesian wells, necessitating great outlay, and the risk of the water being already impregnated with saline matters rendered the sinking of those wells rather a risk. The supply to private houses in the country require serious attention. Particular regard should be paid to the position of wells, all sources of possible contamination should be removed, and filtration should be carried out carefully and constantly. It should also be borne in mind that filters require regular and thorough cleansing. All those persons who have not satisfied themselves by means of analysis as to the condition of their water supply should lose no time in doing so. If they were using contaminated water, they were living on the verge of a precipice, and he, unfortunately, could give too many examples from the immediate neighbourhood of people who had fallen victims to the popular belief that water, if clear and pleasant, must also be wholesome.

The Rev. Canon OWEN said that the people in Boroughbridge were all indebted to their benefactress, Mrs. Lawson, for the supply of water she had given them by the boring of the artesian well on the chapel hill. That well was 256 feet deep, and for 236 feet was through the red sandstone, and he thought the people of Boroughbridge were convinced that the water was free from contamination. The well had been most valuable during the frost, for whilst all other wells in the town had been frozen it had been open.

Mr. J. DENT-DENT said that as chairman of the Sanitary Authority he knew the work that Dr. McCaskie had to do in investigating into cases of illness arising from the use of impure water, and he knew also the extreme difficulty which sanitary authorities, especially in rural districts, were placed as to the supply of pure water. In regard to soft water, some

## LAND REFORM.

No. I.

Mr. William Summers, of Sunnyside, Ashton-under-Lyne, writes as follows to the *Manchester Examiner* :—

The present severe depression of trade will not be without its uses if it has the effect of directing the attention of Englishmen to the important question of land reform. When commerce and industry are languid and languishing it becomes increasingly important that agricultural enterprise should be pressed forward with the utmost energy and vigour. In this way labour and capital that have become useless, or worse than useless, in our towns, may find for themselves profitable employment in the cultivation of the soil. In order, however, that so desirable a result may be brought about, the system of land tenure must be equitable and just, and such as to secure to all engaged in agricultural undertakings the largest possible return for the expenditure of their labour and the investment of their capital. Hence the importance, especially at a crisis like the present, of raising aloft the banner of Land Reform.

This is no doubt a topic to the consideration of which much time and much thought have already been given by some of the most distinguished writers and statesmen of whom we can boast, but if we except the Agricultural Holdings Act of 1873, which may almost be said to have been strangled at its very birth, no great measure of reform affecting the tenure of land in England has as yet become law. It would not, however, be right to deny that agriculture has advanced with rapid strides within recent years. The mere expression of public opinion and the numerous and valuable discussions that have been held have in themselves produced a most salutary effect. The last 50 years have witnessed enormous improvements in agricultural principles and practice. Still there remains much to be done which no haphazard legislation can accomplish.

It becomes, then, a matter of the greatest interest and importance to discover what is necessary to be done in order to render the land of England still more useful to the community at large; to secure, that is to say, the maximum of good to the nation with the minimum of loss and inconvenience to the few individuals who might in the first instance be injuriously affected by reform. For it is but too probable that a few individuals would suffer some slight and temporary inconvenience and loss from almost any scheme of reform that could possibly be devised. This does not, however, afford any justification for refraining from legislating upon the subject, inasmuch as all change involves a certain amount of inconvenience, and all that it is necessary in any given case to show is that vested interests have been respected, and that the balance of good is greatly in favour of the change proposed.

Before considering the changes which it is desirable to make in the laws relating to land, it will be well to give a summary of the evils of the present system. These may be most conveniently arranged according to the class of people most directly and immediately affected by them. As respects the landlords, they are the artificial restrictions under which many of them hold their land—the burdens which these "limited owners" have to bear in consequence of the operation of the laws of primogeniture and entail and the system of strict settlements. As respects the farmers, the evils complained of are the want of fixity in their tenure of the land and the absence of sufficient compensation for unexhausted improvements. As regards the labourers, they are the bad state of cottage property and the inadequate remuneration they receive; and, lastly, as regards the public, if we put on one side the enhanced price of the produce of the soil that results from the above artificial obstacles is the way of more efficient cultivation, we may note the difficulty of transfer and the tendency which undoubtedly exists for land to be monopolised by the small number of very rich people who can afford to indulge in so luxurious a commodity. Men of moderate means who wish to make a business of agriculture find it increasingly difficult to do so to advantage, and it will not be denied that this is an evil of the very first magnitude. It is not of course contended that all the land should be given up to the production of marketable commodities; all that is maintained is that in a densely-populated country like England no unnecessary obstacles should be thrown in the way of the production of the necessities of life. These being the evils of the present system, the next thing would naturally be to consider the

persons had a prejudice and dislike to it, as compared with spring water, for drinking purposes. He believed, however, that soft water was more wholesome than spring water if it were kept free from the impurities which were apt to be washed into the cisterns. The whole question of the supply of pure water in flat districts depended very much on care and continued watchfulness, for even in the best tanks, unless they were properly cleansed, there might come to be impurities which might produce disease. He did not think there was so much fever in villages and farm houses now as there used to be. At all events they did not hear very much of it. He hoped that this diminution of disease was owing, to a considerable extent, to the efforts which had been made by the Sanitary Authority and by individuals in improving the drainage and in providing a better supply of water. He was a strong advocate of soft water tanks for cottages and farm houses. It was an undoubted economy to the farmer if he had a good soft water tank to supply the animals on his premises.

Dr. SEDGWICK said he would advise every householder in Boroughbridge to examine his drains, for the well water frequently got foul by a bad system of drainage. He had been dissatisfied with the water in his house. He examined the drain, and instead of finding it a good brick drain, found it had no bottom, and there had thus been a thorough soaking of the soil and percolation into the well.

Mr. FOWELL thought that enteric diseases in villages arose more from bad drainage and overcrowded dwellings than from the water supply. He knew of a village in Craven where typhoid fever broke out, and on an investigation being made, it was found that the dwellings were overcrowded, and that this was the cause of the outbreak. The water supply came from the hills.

Mr. THOMAS SCOTT said there could be no doubt that rain water was preferable to drainage water. There was sometimes a difficulty in having by drainage sufficient water to supply the stock of a farmer. For putting spouts on the buildings they were quite repaid by the preservation of the buildings; and the manure was very much improved by being saved from the washing of the water that fell from the roofs. He had no doubt that the best plan for a farmer was to impound the water, because, besides the advantages they would have, in case of fire, a good supply of water at hand. As a member of the Sanitary Authority, he had before his notice the case of a village where only two out of a very large number of wells were found to be pure.

After some remarks from Mr. BROGDEN and Mr. LEADMAN.

The CHAIRMAN related what he had done for providing water on his own farm.

Mr. LOYTHOUSE remarked that though the wells in Boroughbridge had been bad, yet there had not been much fever; but Dr. SEDGWICK replied that it was true there had not been much fever, but bad water had a tendency to produce a lower tone of health generally, and colds and other disorders arose.

Dr. M'CAKIE replied on the discussion, and on the motion of the CHAIRMAN a vote of thanks was given to him for the paper. Several other motions were proposed, including that of "the Chairman."

**IVY IN FERN CASES.**—It is a common occurrence to see in the houses of persons who do not give their minds to the matter, fern cases without ferns, or with a few deplorable bits that we are assured will be very fine some day, but too evidently will rather grow smaller, and soon disappear. That the planting and managing of fern cases is a very simple matter need not now be insisted on. It is a fact, that thousands of persons start fern cases and aquariums, only to fail in some way or other, and it is more of a moral than a scientific question, as to why and how it all happens. I wish to point out to all who possess fern cases, and can make nothing of them, that they make capital ivy gardens, and ivies will generally live in them without any management at all, provided they have light always, and water occasionally. As a matter of course, the smallest leaved ivies should be planted, and they should be nicely trained on wires. When a case filled with small leaved ivies is doing well, it is a charming object, and much to be preferred to one occupied with two or three dying ferns.—*Gardener's Magazine*.

remedies that should be applied. But before attempting to show what ought to be done, it may be well to state what ought not to be done. This brings us to consider two specious and plausible schemes of State interference with the rights of property. The first is the nationalisation of the land as set forth in the recently-published first number of "Papers for the People;" or, again, by the late Mr. Odger in the *Contemporary Review* for August, 1871. Mr. Odger held that Government ought to buy up the whole of the land from its present owners, with the view of parcelling it out into small holdings, to be let to anyone who might wish to be a tenant. He imagined that by this scheme the country would be immensely relieved from the heavy burdens of taxation. But it is by no means clear that such a result would be achieved except by something virtually amounting to confiscation. In fact, Professor Rawcett (see *Fortnightly Review*, December, 1872) has brought forward very good reasons for believing that the nationalisation of the soil would in all probability be financially ruinous; and it should not for a moment be forgotten that the State is the worst of landlords. Moreover, even if it could be shown that such a measure was in itself to be desired, it is obvious that it would amount to nothing less than a revolution in our social system, and it is really of so chimerical and impracticable a character as hardly to merit serious discussion. Nay, more, the very proposal of such a scheme is mischievous, as it has the effect of bringing all landowners into discredit, and thus blocking the way against the most moderate and rational attempts to remedy existing abuses. Nor is it after all a thing so desirable as many people seem to think that, everything except land should be exempted from taxation; for it is only reasonable that articles of luxury, among which ought probably to be classed intoxicating liquors, should be at least as heavily taxed as land which produces the very necessities of life. Taxation upon agriculture is open to precisely the same objections as taxation upon trade. This brings us to consider Mr. Mill's doctrine with regard to the unearned increment of land. It has been thus stated by himself: "We want the people of England to say to the landlords, 'You are welcome to every increase of rent which you can show to be the effect of anything you have done for the land; but what you get by the mere rise of the price of your commodity compared with others, what you gain by your own is not the effect of your exertions but of ours, and not you, but we, ought to have it.'" Upon this we may remark that the value of land, like that of every other commodity, is determined by the laws of supply and demand; and it certainly is not easy to see why, if the principle of the unearned increment ought to be applied to land, it ought not also to be applied to personal property as well—to railway shares and works of art, for instance, whose value increases in precisely the same way as does the value of land. Mr. Mill tells us that land is limited in quantity; but so is almost everything else in the world limited in quantity, while land is itself the source of almost everything else in the world. Moreover, such a tax on land and mine as Mr. Mills proposed would in effect be a tax upon the raw materials of industry and the necessities of life. This scheme would further serve to increase instead of to diminish the uncertainty of the tenure by which land is held, and would therefore tend to frustrate that great end which all land reform should steadily keep in view—viz., the application of more and more capital and more and more labour to the soil. The principle laid down by Mr. Mill is thus seen to be economically bad; but it has also another bearing which it does not seem to have occurred to him to consider. If any Government has a right to confiscate the unearned increment of land, or any other kind of property, would it not in justice be bound to recompense any unfortunate speculator whose land (or other property) happened to be decreasing instead of increasing in value? If it has a right to deprive a prudent speculator of that which is to all appearances at least the result of his good judgment, or the simple return for the money paid at the time of purchase, by parity of reasoning, Government ought to pay up the losses of a man whose property has fallen in value in consequence of a stagnation in trade, or its removal to a more flourishing district. Mr. Mill, however, very wisely from his point of view, limited the application of his principle to a flourishing and progressive country, and said nothing of what ought to be done in the case of a retrograde and decaying country or district. But the grave and fatal objections to Mr. Mill's scheme are those of an economical character, and I suppose the principle he has laid

down is to a slight extent, and in a much less objectionable form, recognised in our present income-tax system. It is, of course, perfectly true that "the claim of the landowners, just like the claim of any other class of persons, is altogether subordinate to the general policy of the State;" but what is here mentioned is that the adoption of any scheme of wholesale intervention by the State in the management of landed property would be highly prejudicial to the economical cultivation of the soil, and consequently to the best interests of the community at large.

Having disposed of what may fairly be described as these "deleterious doctrines," we are now in a position to consider some more practical and rational suggestions of reform.

## AGRICULTURAL LABOURERS IN AMERICA AND THE UNITED KINGDOM.

It is said that there never is an ebb but there is a flow, and the converse holds equally true. At least it has been so with the tide of emigration from the British Isles to the Continent of America. A perusal of the Board of Trade statistics referring to emigration and immigration, shows a wonderful decline in recent years in the total amount of emigration from the United Kingdom to all countries; but more particularly to the United States and British North America. It appears that during the ten years from 1841 to 1850 (inclusive) the emigrants from the United Kingdom to the United States numbered 1,094,556, and to British North America, 429,044; the total to all places having been 1,684,892. From 1853 to 1860 (eight years), the emigration of "persons of British origin only" was to the United States, 805,596; to British North America, 123,408; and to all places, 1,312,683. From 1861 to 1870 (ten years), it was to the United States, 1,182,636; British North America, 130,310; and to all places, 1,571,829. And from 1871 to 1877 (seven years), the figures were—United States, 774,302; British North America, 123,470; and to all places, 1,174,201. The tide of emigration to America seems to have reached its height in 1873, when close on 167,000 persons of British origin sailed for the United States, and over 29,000 for Canada; and since then it has been steadily and speedily on the wane. During the past three years the totals were only 181,228 to the United States, and 29,381 to Canada, as compared with 442,236 to the United States and 74,155 to Canada during the preceding three years. Last year barely 45,500 persons of British origin went to the United States, and only about 7,700 to Canada, and then no fewer than 44,378 returned from the former country and 5,687 from the latter; so that last year there was practically no emigration to the United States, and only a very small amount to Canada. It may be noted that, while the emigration to America has declined so greatly, the total to Australia is being well maintained, 30,000 having gone there last year, as compared with 82,000 in 1876.

The great majority of those who have emigrated to America and elsewhere were, of course, working people, and the first and main cause of the cessation of the westward flow was the more even balancing of the positions of the working man in the two countries, the advance of wages in the one and the decrease in the other. In Scotland more particularly, emigration agents drew largely from the ranks of the farm labourers, so largely indeed that mainly thereby the labour question has become one of the most serious at present affecting Scottish farming. During the past ten or twelve years the wages of farm servants in Scotland have advanced from 30 to 40 per cent., and that emigration was one of the chief agencies in the creating of that advance there cannot be the shadow of a doubt. Had the strong current of emigration, which caused so much alarm a few years ago, continued till now, the supply of rural labour in Scotland would have been so seriously lessened by this time that one can hardly imagine how the agricultural operations of the country could have been kept fully in motion. But as the figures quoted show, a turn of the tide occurred; and that that turn was natural, looking to all the circumstances, and supported by substantial reasons, an attempt will be made to demonstrate. It is put forward as a great incentive and attraction to the life of a working-man in America that he has the easy prospect of a home and estate of his own. That assertion may be considered afterwards. Meantime the relative positions and emoluments of the agricultural labourers in America and Scotland in the capacity of

labourers, and in that capacity only, will be discussed. The writer, it may be remarked, has had ample opportunity of becoming acquainted with the life and circumstances of the rural labourers both in the Old World and the New.

Take first the subject of wages, which probably outweighs all others in point of importance. A large number of agricultural labourers are engaged by the year in America as in Britain, and receive wages and board in like manner. Monthly payments form the rule, while a good many are employed and paid by the day or week. In the Southern States of the Union the rate of wages at present runs from £24 to £30 a-year and board; in the Prairie States in the Far West, such as Kansas, and its neighbours, from £13 to £53 without board, or from £30 to £28 with board; in the States of Iowa, Missouri, Illinois, Indiana, Ohio, Kentucky, &c., from £28 to £40 with board; and in Michigan and Eastern States from £30 to £40 with board. In Canada the average is about £36 a-year with board. Day labourers throughout the States and Canada get about a dollar (4s.), or about £60 a-year without board. Railway employes and others in positions of trust, or at work requiring special skill, get probably a dollar and a quarter (6s.), or even in some cases a dollar and a half (7s.) a-day. In some parts of the older settled and better farmed parts both of the States and Canada, log or other cottages, costing 200 dollars (£40), or sader, are provided for married servants; and an exceptionally trustworthy married servant gets in addition to this free house, a cow's keep, firewood, and a dollar per day, or £60 a-year. From these figures it will be seen that the average rate of farm servants' wages in the American Continent could not be stated at more than 15 dollars a-month or £36 a-year, with board. How, then, does this rate contrast with the average rate in Scotland? From the reports of recent hiring markets throughout Scotland, it appears that ploughmen get from £30 to £38 a year, with board. As far as the emoluments are concerned, it will thus be seen that the farm servants of America and those of Scotland are as near as might be upon a level. The scale seems a trifle heavier on the American side, but when it is considered that clothing is from 25 to 30 per cent. dearer in America than in Scotland, boots about the same, and washing 100 per cent. higher, the advantage, if there really is any, belongs to the "Land o' Cakes."

"Facts are obichs that wiuna ding," and those stubborn fellows make it very plain, as has been seen, that in a direct money point of view, agricultural labourers are as well appointed in the Old World as in the New. Emigration agents, however, and many general exponents of the Far West draw up an array of brilliant attractions which they hang round the life of the working man in America, and which they argue can never come within the reach of a ploughman in Scotland. Some content themselves with the broad, general, characteristically American assertion that "in no country on the face of the globe can the labouring man enjoy so completely the fruition of his labour as in the continent of America." Others take pride in pointing out what they call the political advantages which the United States hold out to working men, as compared to the United Kingdom. In that country, it is asserted, aliens are treated with consideration, and have their right to "life, liberty, and the pursuit of happiness" secured to them by the fundamental law of the land; that there can be no Established Church and therefore no tithes, and that every man is endowed with the right of voting as soon as he can exercise it with advantage to himself and the country. As the result of these political rights it is asserted that laws favourable to labour are enacted. "Working men being the most numerous portion of the elective power can, and generally do, elect men favourable to their own interests." But after all these supposed advantages comes another, more magnified and boasted of than any—namely, the free homestead system. In other words, the Homestead Law, which secures to the actual settler 160 acres of land (or, if within the railway limit, from 10 to 20 miles—80 acres) free of cost. How beautifully this point is spun out! What a wide difference this law itself makes between the positions of the agricultural labourers of England and of the United States! "The man who is accustomed to farm work can, by his own labour, not only become a farmer, enjoying all the fruits of his own toil, but he becomes the owner of the land he cultivates, and in a few years, as settlement increases around him, he finds himself not merely a farmer owning a cheap farm, but, in all probability, he finds

himself the owner of land of great value, securing himself an ample competence and a valuable inheritance for his children." Nor are they yet finished with their advantages. How different is the social position of the working-man in the Old World and the New! In the former, we are told, the labourer has to cringe and bow to the aristocracy and cry in vain for the crumbs which fall from the rich man's table. In the Far West, on the other hand, it is asserted that "being a labourer is accounted an honour rather than a discredit, and his labour is sought for at good remunerative wages." He sups with his master, chews as much tobacco, and (in leisure hours) displays as much fine linen. In short, Americans would fain affect that among them "of caste there is none," one man being as good as another.

But, coming to sober argument, what do all these lauded advantages really amount to? Have they any body at all? Or are they merely visionary? The supposed political and ecclesiastical advantages and liberties may be passed over by a sentence. As yet the power which the working man is asserted to have at the polling booth in America has not been exercised greatly to his advantage, while few working men in this country grumble at what Americans are pleased to call our "religious intolerance." It may be granted that in most parts of America (this admission draws a little upon our charity, however!) the working man's right to "life, liberty, and the pursuit of happiness," is made secure to him, and, of course, it need hardly be said that he enjoys similar rights in this country. The advantages conferred by the Homestead Law open up an important and complex question, deserving to be dealt with separately. Away from home Americans boast boldly of their unique social system; of the great equality and entire absence of caste which characterise the people of the Great Republic. No doubt, in some ways there is an attempted equality—an artificial levelling of master and servant—a levelling, however, which, to say the least, is unsatisfactory and inconvenient to both. Its advantages (if, indeed, it has any) are out of all proportion to its disadvantages. It is a mock equality which for a moment may whirl the mind of the working man into the fancy that he is as great as his master, and his will as dominant, but which ever and anon reminds him tantalisingly that he is still a working man and his master his exacting superior. The equality is limited to the meal hours (indeed it does not extend to that in all cases), and to the polling-booth. In America the working man has no regular hours of work and rest; he must plod away when his master requires him to do so, from sunrise till sunset. In the more westerly States, at any rate, even the Seventh Day is not to him a day of rest.

It is not contended that the social condition of the labourer in Britain, though equally as congenial and natural as in America, is in all respects what it ought to be. On the contrary, it is admitted that there is a claimant need for improvement, especially in the erection of labourers' cottages and in generally increasing the means and opportunities for married servants. A good deal has been done in this way during the past few years; but there is still a wide untouched field to go over. This great and important question cannot be fully discussed here, but it may be referred to as one urgent upon the attention of landed proprietors and all patrons of agriculture. In conclusion, the arguments may be repeated that in a direct money point of view, and also in regard to social, political, and religious advantages, the agricultural labourer is as well appointed in Great Britain as in America.—*Scotsman*.

**QUITS.**—In company, an English lady, half jocularly of course, attributed a very polite readiness for wine to the far daughters of Erin. "I believe that in Ireland," she observed, "it is quite customary for a lady, if she only catches the eye of a gentleman earnestly directed to her at the dinner table, to say, 'Port, if you please. Promptitude is the order of the day.'" "Yes," replied the Irish lady, not over pleased with the imputation, and determined to repay it with interest, "and the promptitude takes another direction in your country, madam." "How do you mean?" "Why, when an English lady finds a gentleman's eye upon her at the table, I understand she averts her countenance, and blushing, says in her gentlest tones, 'You must ask papa.'—*Ayr Advertiser*."



## SUSSEX HERD BOOK SOCIETY.

An adjourned meeting of this Society was recently held day, at Iwerham, for the purpose of promoting the future management of the Sussex Herd Book. Mr. A. HEASMAN, of Caçeto, Angmering, occupied the chair.

The CHAIRMAN commenced the proceedings by reading the minutes of the last meeting, when it was decided that the Society should be formed, and that members should be admitted on the payment of one guinea. He added that since the last meeting he had had circulars printed and sent to about 180 gentlemen interested in the Sussex breed of cattle, and about 50 had intimated their desire to become members. The Chairman also announced the names of the noblemen and gentlemen who had kindly offered to contribute to the two champion cups of £25 each, one to be given to the best male and the other to the best female of the Sussex breed of cattle, to be exhibited at the meeting of the Royal Agricultural Society of England, in London this year.

The CHAIRMAN said the next part of the business was to consider the formation of a committee; should it consist of the whole body of the members, or would they prefer a small working committee?

It was agreed that all members should act on the committee this year, three being a quorum.

Mr. A. Heasman was elected chairman for the year.

It was decided that none but members should be allowed to make entries in the Herd Book, and that the entrance fee be 2s. 6d. for each animal.

The rules at present are these:—

1. That this Society be called the Sussex Herd Book Society, for promoting the breed of Sussex cattle.
2. That members be admitted to the Society on the payment of a fee of one guinea, and be entitled to a copy of the first volume of the Herd Book.

## THE AGRICULTURAL DEPRESSION.

A well-known agriculturist writes to us as follows:—  
“I believe that the farming interest was never in so forlorn a condition before, and the worst is there is no prospect of more prosperous times near at hand. The only relief is that in all countries and in almost all industries the same state of things exists. In such a storm it ought to be all hands to the pumps; but landlords seem inclined to let ship and cargo go to the bottom before they will look the matter in the face. How few of them have come forward as they ought. Ten per cent. seems in their eyes the panacea for all the ills the poor farmer has to bear. The State seems to think cupping best for the patient.—5d. Income Tax will pretty nearly ease him of his life blood. As far as our legislature is concerned, I certainly think we might shut up the Parliament, whether Liberal or Tory. Why not have two Houses, one for home affairs and one for foreign? Everything is shelved, and a great many urgent reforms promised are left to sleep in hopeless oblivion because some war or rumour of war stops the way. The ship of State is only half manned. As to Protection, I would not protect the farming interest at the expense of our working population, though I have lost £20,000 in twelve years. Cheap bread is a blessed thing, though even the working man says “bread may be too cheap.”

**A FARMER SHOT BY HIS SON.**—A very melancholy accident happened recently to Mr. Fossey, a large farmer, residing at Camberlow-green, near Baldock, Herts. Mr. Fossey had been out during the morning rabbit-shooting with his son, a lad about 17 years of age, just home from school, and when the accident occurred they were returning home, one on each side of the hedge. By some means the gun carried by the son was discharged, and its contents lodged in the heart of Mr. Fossey, causing instant death. It is a singular coincidence that both the wife of the deceased and his brother came to their deaths by accident, the one being drowned through slipping into a fish-pond in the garden, and the other being also drowned while crossing a plank bridge in returning home from a visit.

## FARMERS' ILLS AND THEIR REMEDIES

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I think that the tenant should no longer be compelled to farm in swaddling clothes or in a straight jacket, but should have every freedom to grow what he thinks proper, and so meet the competition forced upon him by foreign markets.

Moreover, education must have done something for the tenant-farmer, and surely he must know his business better than buyers and others who frame those cropping clauses for him. The introduction of feeding stuffs, &c., has entirely done away with the necessity of compelling the tenant to consume the produce of the farm on the farm. He can dispose of hay and other produce with far more profit to himself and benefit to the farm than by consuming it on the farm. In fact, he must be placed in a position to watch the markets and manage accordingly. As to security for capital, I am more than ever convinced that this must be demanded, and I cannot but think that the landowners must themselves see that had there been a compulsory Tenant-Right they would not have had to meet the necessity now forced upon them to reduce their rents.

In my opinion the land has never had a fair chance of showing what it can produce, and will not until a compulsory Tenant-Right measure be passed and the land kept in a progressive state of cultivation.

As to national advantage, I think now that the attention of the public is being called to the question, that very little agitation would suffice to bring about a change in land tenure, and the more so since the depression in commercial circles is causing more attention to be paid daily to the land question. I quite agree with what you say in the *Mark Lane Express* about the landowners returning 10 per cent. of rent to their tenantry. It is a species of out-door relief, and I believe until the Law of Distress is done away with, we shall continue to have rents pushed beyond what they fairly and commercially should be. I believe high rents, in too many instances, are the result of the action of the Law of Distress.

I am, Sir, &c.,

PROGRESS.

**THE LEITRIM ESTATE.**—A few days ago Mr. Gibson, Sub-inspector of Constabulary, Rathmullen, inspected the old police barrack at Cooladerry, with a view of its reoccupation by a force of constabulary. Some time before Lord Leitrim's murder this station was discontinued, but it is now deemed necessary to re-establish it, although there is a special protection party of police stationed in the house of a bailiff on the Leitrim estate, who resides only about a quarter of a mile distant. The state of affairs is, however, deemed so unsatisfactory as to necessitate the presence of a large force of police. There is now a force of forty men in the Fannet portion of the estate. Fannet is the peninsula to which the boat containing the supposed assassins of Lord Leitrim crossed the Mulroy Bay immediately after the triple murder on the 2nd of April last.

**FREE TRADE AND RECIPROCITY.**—An extremely large number of signatures have already been affixed to the memorial which is to be presented to the Lord Mayor urging him to convene a public meeting in the Guildhall with regard to the present depression of trade. The memorialists desire a Parliamentary inquiry with the object of modifying, if such should be found advisable, the existing system of free trade. From inspection of the document itself we are enabled to state that the signatories include many of the largest firms in the city—wholesale warehousemen, bankers, and merchants of the highest standing.—*Citizen.*

**EMISSION OF RENT.**—Mr. W. H. Smyth, of Ekington Hall, Lincolnshire, has returned to his tenants 12 per cent. of the rental of the arable land on their farms.



## THE PROSPECTS OF FARMING.

## No. II.

When any business is unprofitable the retrenchment of such expenses as can be diminished without lessening profits is, of course, sound economy, and in so far as it will conduce to cheaper production it must tend to restore prosperity to the producers. In the case of farming, lower rents and lower wages will help farmers to meet foreign competition, and this is especially so with respect to a reduction of rents, which is an unmitigated advantage to the tenants. Lowered wages are a less certain benefit, though they may be inevitable for a time. The best men are apt to leave our villages when farm wages are low in proportion to the wages given in other branches of industry, or to the earnings to be made in distant lands. Thus for the lower pay farmers may get a lower class of labour, while they may not be able to secure enough of even that when other industries in the country are in a flourishing condition. Besides this, it is to be observed that the saving which can be effected by a reduction of wages is, in the case of a farmer, a very small one. He must be a large farmer who can save a hundred pounds a year by any diminution of wages that is feasible even at a time of general depression like the present, when thousands of men are out of work in all parts of the country. Another advantage which a reduced rent has over lowered wages is that while the former is not likely to advance again as long as farming is unprosperous, the latter may at any time be forced up to their old level by a demand arising in other departments of employment. These remarks, however, are not intended to disparage a reduction of farm labourers' wages at a time of extreme adversity, such as farmers are now suffering from, but only to show that it is unwise to put too much faith in the advantage to be gained by such a saving, and to point out the uncertainty of its continuance. There is far too great a disposition amongst farmers to exaggerate the importance of little savings in labour, tradesmen's bills, rates, and taxes, to the neglect of the more serious impediments to their success. Blacksmiths and wheelwrights do not often save fortunes; on the contrary, most of them work very hard for a scanty income. It is undoubtedly a grievance that rates should be unfairly levied; but it is absurd to make the rectification of this inequality, as so many do, the chief object of agitation. If rents, rates, labour, and tradesmen's bills were all reduced to the greatest possible extent, we should still fall short of making farming in this country profitable under other existing conditions. These savings will render losses less, but will scarcely turn them into profits, unless the losses were previously very small. By all means let us have expenses pared down to the utmost extent consistent with good farming; but let us bear in mind the far greater importance of removing from Agriculture the trammels under which she has so long been doomed to labour. If the delicate state to which a combination of adverse circumstances has reduced the British farmer renders it advisable for him to strain at gnats,

there is all the more reason for him to take care that he does not swallow camels.

To diminish the cost of production is important, but to increase the production itself is more important still. Foreign agricultural produce has lately ruled prices in our markets to an extent never before realised, and the competition, probably, has not yet reached its climax, unless in the case of wheat, which it can hardly pay the American farmer to send us at a lower price than is now current, though at some future time the Indian farmer may. For some time, at least, a bad crop in America, or a generally deficient harvest in European countries, may occasionally send the prices of corn up for a year or two; but we must face the probability of having to produce all the principal commodities of the farm at something like the prices which prevail this year, and, in the case of some of them, at lower prices still. If we cannot do this, then agriculture in this country must permanently decline. If we can do it at all, it must be by getting a greater produce from our fields and pastures, as no feasible reduction of expenses can by itself be sufficient. But to produce more we must employ more capital, and under such circumstances as at present prevail there is less disposition than ever to embark capital in farming. All the greater reason, then, for removing the many discouragements to its employment. Many, in despair, say it is hopeless to attempt to stem the tide of foreign competition; but Englishmen must have degenerated sadly in these days if they will sit down and allow the finest agriculture in the world to be "wiped out" without a struggle. There are farmers even now who are saving money, and they are, as a rule, the best farmers—high farmers—while the men who have been struggling on with farms too big for their capital have sunk or are sinking. It is of no avail to talk of laying down all the arable land to pasture. That by itself would be a permanent decline, and a great deal of land is quite unsuitable for pasture. We must produce more, or acknowledge ourselves beaten. A duty on foreign food is proposed by some, but it is not worth while to discuss so visionary a scheme. The people at large would not tax food to save farmers, even if Protection would save them, which is, at the best, doubtful. We come back, then, to our previous statement, that the only hope of the permanent salvation of British agriculture is increased production, by means of larger capital and more enterprise.

But who is to employ the increased amount of capital? The landlords generally will not, because three-fourths of them are limited owners, holding under settlements, and to spend money on their estates would be directly opposed to the interests of themselves and all they have to provide for, with the sole exception of the heirs to the estates. No one else dares, because his property would not be secure; it would be liable to confiscation, according to law. Nor is this all. On many estates it would be folly to spend money in pro-

ducing more food for game; and on a larger number still enterprise is checked by the most vexatious restrictions against the cropping of the land and the sale of its produce. Capital must be safe, as far as law can make it so, and enterprise must be free, before our agriculture can be said to have a fair chance in the great conflict with all the world. Great Britain might as well attempt to hold her own in warfare with her old wooden ships, men in armour, and bows and arrows, as to encounter the competition of foreign food producers, with encumbered land and farmers in leading strings. In a sense which the preceding remarks will correctly interpret to those who do not wilfully misrepresent them, we want free land, free capital, and free farmers to give us that fair field which, whether with or without favour, we have never yet had in this country, if we would not have the finest agriculture which the world has yet seen sink into insignificance.

### VARIOUS NOTES.

At the last meeting of the Society of Political Economists at Berlin, Dr. Eugel, the head of the Statistical Office of that city, gave an outline of the general results of the agricultural census of the past year. He observed that previous to 1871 there were no agricultural statistics in Germany of any value, but in that year the Imperial Council inaugurated a new system. The Statistical Office had to issue forms to each parish—56,000 in all—and the manager of every estate or farm was required to give particulars as to the quantity of meadow and arable land and the land under cultivation for the different crops, &c., subject to his management. The result of the agricultural statistics of the year 1878, which were obtained under the new system, were as follows:—The total value of the entire corn harvest, including wheat, rye, barley, and oats, for 1878 was, calculating according to the average prices in October, 1,714 million marks, or £86,200,000 sterling. The average price of wheat was 182 marks, or £9 2s. per kilogram, that of rye 180 marks, or £8 10s. per kilogram. The average production in Germany in 1878 had been 1,238 kilograms per hectare for wheat, and 1,694 kilograms for rye. The total quantity of rye produced—rye being the most important cereal in Germany—was 1,734,000 tons, each ton being of 1,000 kilograms, or about 2,000lb. The total value of the rye harvest was therefore 315 million marks, or £15,750,000 sterling. The total value of the potato harvest, on the other hand, was estimated at not less than 831 million marks, or £41,550,000 sterling, while the hay harvest was calculated at a total value of 560 million marks, or £28,000,000 sterling. The value of the wine produced in 1878 was only 120 million marks, or £6,000,000 sterling. The grand total value of the harvest of all descriptions in 1878 was no less than 4,402 million marks, or £220,100,000 sterling. The total value of the harvest of France in the same year was calculated at 9,600 million francs, or £384,000,000 sterling, which of course includes the vast and valuable wine harvest of that country.

Compared with 1877, the corn harvest of Germany in 1878 showed an increase in quantity, but owing to the lower prices which prevailed in the latter year the total value was smaller. In 1877 the total value was 1,928 million marks, or £96,400,000 sterling, as against 1,714 million marks, or £85,700,000 in 1878, being a decrease in value of 220 million marks, or £11,000,000 sterling.

As regards the imports of cereals into Germany, the quantities of wheat imported in recent years had been as

follows:—306 million kilograms in 1872, 363 millions in 1873, 477 millions in 1874, 499 millions in 1875, 580 millions in 1876, 940 millions in 1877, and 960 millions in 1878. The imports of rye had been very irregular, viz., 950 million kilograms in 1872, 700 millions in 1873, 105 millions in 1875, 1,190 millions in 1877, and 674 millions in 1878. The exports had been comparatively small, and the balance had constantly been on the side of the imports, both of wheat and of rye. Thus in the year 1877 the excess of rye imported over the quantity exported from Germany amounted to no less than 1,014 million kilograms.

In Mozambique (East Africa), a Society is formed with a capital of £178,000, for the cultivation of poppies for preparing opium. The company obtained 50,000 acres of uncultivated land from the Portuguese Government for the purpose, and it has obtained a special right at all the commissions of the customs, to export free of duty all opium produced for 12 years from the province of Mozambique. According to present reports, the poppy thrives excellently there, and the opium surpasses in quality that grown in the East Indies.

The *Colonies and India*, in a very excellent review of Colonial affairs during the past year, says that the condition of Australasia has been one of almost unchecked prosperity. The same journal states that during the year 1878 emigration from the United Kingdom has greatly diminished, and the arrivals from the United States, once the principal field, are now nearly equal to the departures for that country. Canada, however, still draws many from the United Kingdom; but the Australasian Colonies form the chief object of attraction for those seeking a home beyond the seas.

From the *Leeds Mercury* we learn that the number of bales of Colonial wool imported into the United Kingdom in 1877 and 1878 was according to the following table:—

	Imported all 1877.	Imported to 18th Dec., 1878.
Sydney .....	183,808	175,641
Victoria .....	333,094	298,767
Tasmania .....	21,562	21,200
Adelaide .....	108,134	104,833
New Zealand .....	169,280	178,694
Swan River .....	7,905	8,132
Cape .....	169,974	155,171
	993,757	942,438

In consequence of the development of the manufacture of soft and all wool-fabrics in the Bradford district, and the spinning of yarn for other districts, Butany wool, especially the finer sorts, has been in steady demand, and the total quantity taken for consumption must have been much larger. If the efforts now making by many firms in the district to produce goods to compete with the French makers succeed—and there seems every probability that they will—the consumption will become even larger.

From Victoria we learn that the Rabbit Bill was passed on the 12th November, and the Government have sent notices to a large number of pastoral lessees and extensive landowners requesting them to see that the work of rabbit destruction is begun on their land, especially on the boundaries adjoining farms, so that the crops may not be further injured. The farmers will have notice to destroy the rabbits as soon as the harvest has been gathered. It is stated that four years since four couples of rabbits were let loose in the mallee scrub and these prolific little quadrupeds now number millions.

The *Western Australian Times* recently stated that:—“Mr. John Forrest, the Acting Commissioner of

Crown Lands, was about to proceed to the Lac-pede Islands, it is supposed with a view to ascertain what quantity of guano remains upon the island, and intimates that this step is taken by the Government to place beyond doubt the statements lately current to the effect that not more than 10,000 tons of guano now remain on the islands.

The *Queenslander* of October 19 thus refers to a destructive parasite affecting cattle in Queensland:—"We find there is a considerable mortality amongst cattle in some of the coast districts caused by a parasite—*Amphistoma conicum*—which attaches itself in large numbers to the stomach, usually the third stomach. Some years ago the whole of the cattle belonging to the Benevolent Asylum, Dunwich, were carried off by this insect; and latterly it has extended to the Wide Bay and Burnett districts. A few weeks ago we received specimens of the insect from a correspondent at Bowen, who states that it is committing havoc amongst the female cattle in portions of that district. The subject has been brought under the notice of the Board of Inquiry into Diseases in Stock, and we should recommend any of our stockowners who are in a position to do so to assist the Board in investigating the subject, by forwarding such information as they may be possessed of to the Secretary of the Board without delay. The insect will be readily recognised. It attaches itself to the coating of the stomach, where it is frequently found in hundreds, and is of a conical form, and nearly the size of a common pea."

Ostrich farming continues to receive a large share of attention throughout Cape Colony, and the weekly sales have been liberally supplied with feathers. A decline occurred early in November, owing to the fall at home; but during the few succeeding weeks, though prices have ruled very irregularly, they have not suffered to any appreciable extent. Among the large quantity offered the superior classes have been well represented, though the proportion of pluckings from young birds and the inferior grades of drabs and blacks has been very large. Good whites, as also white tails and the better description of blacks, remain in fairly active demand, and for other classes the competition continues unchanged. Whites vary from £7 10s. for inferior, to £40 for white primes per lb. At Clifford's Camp a sale of birds has been held, and twenty or thirty pairs sold at from £70 to £200 a pair. Thirteen chickens brought £123 10s. The export of ostrich feathers during the quarter recently ended has been £157,773, as against £90,910 in the corresponding period of 1877. The *Country* says that agricultural shows appear now to have extended to Central Asia, the latest news being that an exhibition on a large scale is about to be held at Tashkend, on which occasion the Government will give prizes consisting of gold and silver medals and caftans of honour.

The fat-stock show held at Chicago in December last was adjudicated by butchers—not breeders. This circumstance is of considerable interest, as showing that the lesson taught by experience here has not been lost on our American cousins. Loud have been the complaints from various sources as to the unsatisfactory way in which the judging at our great fat-stock shows has on divers occasions been carried out; and when breed is pitted against breed in contests for champion prizes it must be evident to any impartial observer that the natural bias which exists amongst judges for the particular breed in which they are personally interested, will, if not balanced with almost impracticable accuracy, result in awards which are more or less unsatisfactory. No one questions the integrity of the judges, but everyone believes in certain weaknesses which are incidental to mortals, and which must follow them even to the exercise of judicial functions.

And when there is preponderance of bias, as in the case of two representatives of one breed to one representative of any other breed, it denotes an excess of power which, however conscientiously used, is always open to doubt and suspicion. This could so easily be avoided by appointing men as judges who are completely outsiders. It has been frequently urged in the columns of the *Mark Lane Express* that the legitimate province of the breeder and feeder ends with the production which is the result of their combined industry—the fattened animal, and that the merits of their handiwork should be judged by the class of men into whose hands it next passes. The ability of butchers and salesmen to determine which is the best fat animal in a class, in a breed division, and in an entire show, will not be disputed, and the sooner the plan is adopted the better it will be for the success of these shows, for breeders' industry, and for consumers of meat. The Chicago show will no doubt eventually grow into larger dimensions, and that, too, in short time, for things of this kind do not take long to develop in America; and as they have begun on a sound principle it may be expected to prove an educational institution of great value to the country, and an incentive to stock breeders who are not afraid to be judged by results.

Another matter in connection with fat-stock shows, which has been urged again and again in these columns, is the uselessness of classes for stock which are older than the age at which such animals usually come to the butcher. It is a waste of time, money and food, to serve no useful purpose whatever. The consuming value of such animals is altogether out of proportion to the cost of production, and cannot be fairly represented by the prices which butchers will sometimes pay for them by way of an advertisement to their business. Three years is quite as long as any one can afford to keep an ordinary bullock; and not only so, but our best breeds have attained an earlier maturity than that, and are sold in the every-day course of business at from two to two-and-a-half years old. There is, therefore, nothing to be gained in an educational point of view, and much to be deprecated on other grounds, by offering prizes for bullocks which exceed three years in age. Classes for cows are, of course, necessary, but those for heifers are not what breeders would be likely to aim at, inasmuch as they represent barren animals only. At all events, the chief production of beef is from bullocks, and those are what is mostly wanted in fat-stock shows. A little more age might be necessary for West Highland oxen, but beyond this exception it is difficult to find a valid reason for prizes being offered for bullocks of greater age than that we have stated above. On the other hand, classes for bullocks under twenty months old would be far more in accordance with the capabilities of our best breeds, and with the necessities of the times. The general shrinkage which is now going on in the money value of articles of food and clothing, in that of rents and labour, and in almost everything to which a money value can be attached, will include showyard premiums within its scope; not necessarily to reduce their amounts, but inevitably to dictate their expenditure in such manner as will tend to induce economy and practical usefulness in the production of food.

The Prince of Wales has again shown the general interest he takes in agricultural matters by allowing his name to appear as patron of the British Dairy Farmers' Association.

The *Irish Farmers' Gazette* states that the Cork Society have decided to hold a spring show of bulls on Tuesday, 8th April. A deputation from the Cork Agricultural Society will wait upon the Government in February with a view of urging the Government to con-

have the Cork Model Farm for four years longer. The export of butter from Dublin during the past three years having been stated in the *Times* and other papers to be in the following quantities—

1876	...	...	53,396 firkins, &c.
1877	...	...	37,734 "
1878	...	...	25,688 "

the *Gazette* took the pains to ascertain the facts of the case, and found that the Great Southern and Western Railway alone carried much larger quantities of export butter than the foregoing figures would indicate, namely—

1876	...	...	410,240 firkins, &c.
1877	...	...	374,349 "
1878	...	...	352,171 "

Sir Samuel Wilson is stated to have said, at a recent meeting in Melbourne of the principal Australian meat-preserving company, that the meat then in course of packing in the tins costs "a farthing less than nothing per sheep;" or, in other words, that the sums realised for the sale of the skins and tallow were sufficient to cover, or rather more than cover, the original prime cost of the animals. Commenting on this statement, the *Irish Farmers' Gazette* remarks, that although "American-preserved meats have lately been running the Australian produce very close in the English markets, the invention of machinery which enables twenty-four tins to be packed in Melbourne in the same time in which one tin is filled by hand in Chicago ought to enable our colonial brethren to distance all competition." New South Wales exports tinned meats more largely than either of the other colonies, but it is not stated whether, with all the advantages of Free trade, they can show the raw material at a lower cost than Protectionist Victoria; if so, a novel calculation would be necessary to show how much less than nothing their meat costs them before they begin to tin it. However this may be, if the Australian colonies find a way to send us fresh meat, as they probably will, we may yet live to see the day when meat will again be cheap in Great Britain.

In connection with the meeting of the Highland and Agricultural Society, proposed to be held at Kelso, in 1880, suggestions have been made to offer a special prize for a stallion for agricultural purposes, to travel the district in season 1880, and that the family prize for Border Leicesters should include one aged tup, two ewes, two gimmers, two ewe lambs and two shearing tups, all bred by exhibitor except aged tup. These proposals appear to have met the approbation of the Board, but some others were not so favourably received.

According to the *St. Petersburg Gazette*, the Government of Russia has sanctioned the holding of a dairy show at Helsingfors, in Finland; and not only that, but has granted a sum of 2,400 roubles towards the travelling expenses of country people in poor circumstances desirous of visiting the exhibition.

A report from Canada states that there are some 250,000 head of cattle and 500,000 sheep at present being stall-fed in the province of Ontario for shipment to British ports in the spring. Exporting firms there intend to dispatch one vessel a day, laden with sheep and cattle, from Montreal or Quebec as soon as navigation opens. A Toronto firm is at present in negotiation with the British Government for supplying the troops stationed at Cyprus and Gibraltar with beef and mutton after next spring.

An important sale of cart horses, eligible for the English Cart Horse Stud Book, is announced for Wednesday, the 12th of February, when Messrs. Sexton and Grimwade will sell 29 cart horses, besides 2 trotting

horses and 3 hackneys, at the Outseats Stud Farm, Alfreton, Derbyshire. The Outseats stud has been established upwards of half-a-century. Since the year 1830 Messrs. Nix have travelled stallions. The great aim of the present proprietor has been to stick to the old-fashioned sort, possessing weight and power, with great bone and abundance of hair, with strong, firm feet, and the best of action. The catalogue is admirably illustrated with portraits of the principal mares, fillies, and entire colts to be sold at the auction.

The *Prairie Farmer* says:—Advices from Washington state that Western and Eastern exporters of live cattle, in view of the recent English legislation relative to the importation of cattle into Great Britain, have written to the Treasury asking the designation of a veterinary surgeon at each of the export ports, whose certificate that cattle are healthy will be accepted by foreign Governments. The department has replied that there is no law for the appointment of a veterinary surgeon, but that inspectors may be designated at each port, and that collectors may, when satisfied that any shipment is free from disease, give the exporter a certificate to that effect.

Following are the instructions sent out by the Treasury, a copy of which has been received by the collector of customs at this port:—

Treasury Department, Washington, D.C., Dec. 18.

To Collectors of Customs and others:—The following dispatch has been received by cable, through the Department of State from Liverpool:—

Unless cattle shipped from United States have Government health certificate when embarked, slaughter probably compulsory on landing, paralysing trade. Can you cable Welsh assurance appointment veterinary officers at seaports?

You are authorised to cause an inspection to be made of all neat cattle proposed to be shipped from your port to Great Britain, and to issue your certificate that such cattle as shall be shipped are free from all disease, and that there is no known disease in cattle at your port, or in its neighbourhood.

In States in which there are officers authorised by law to examine into the diseases of cattle, the collector may avail himself of their services, as the basis of his action, at the expense of the shippers.

By order,

H. F. FRENCH, Assistant Secretary.

THE INTERNATIONAL AGRICULTURAL EXHIBITION IN LONDON.—The prize-sheet and regulations for the international exhibition and trial of agricultural implements and machinery, to be held in London, have just been issued, together with a map showing the site of the exhibition. In addition to the prizes already announced the Royal Agricultural Society offer ten silver medals to be awarded by the judges in cases of sufficient merit to any new implement which may be shown. The judges will also be empowered to make special awards of medals for efficient modes of guarding or shielding machinery, especially when worked by steam, from contact with persons immediately engaged in attending to such machinery while at work. Amongst the other regulations it may be noted that no exhibitor will be allowed to enter more than one article of the same construction, and that provision is made for a minimum fine of £1 for every duplicate exhibited or brought into the exhibition in breach of this rule.

PHONETIC. — "Phairest Phlora," wrote an amorous youth, who is smitten with the phonetic craze, "phorever dismiss your phears, and phly with one whose phervent phancy is phixed on you alone. Phurcads, phamily, phather—phorget them, and think only of the phature; Phew phellows are so phastidious as your Pherdinand, so phaign not phondness if you phael it not. Phorego phrolic, and answer phinally, Phlora." "Oh, Pherdinand, you phool!" was phair Phlora's curt reply.

## LORD TOLLEMACHE ON CHESHIRE CHEESEMAKING.

In response to invitations from Lord Tollemache, his principal tenants and a few neighbours met at Peckforton Castle on Friday week.

His LORDSHIP said those who were present at the Cheshire Agricultural Meeting at Crewe in 1877 might recollect that he then performed the disagreeable duty of urging the farmers of Cheshire not to reckon on a continuance of high prices for cheese, but to be prepared for a fall which he expected would occur before long to the extent of at least 10s. or 12s. a cwt. That expectation, as they now knew to their cost, had been fully realised. Some attributed this fall in the price of the great staple of this county to the serious depression of trade. In his judgment it was to be attributed partly to that cause, but principally to the vast importations from America, Canada, and other countries, arising from the policy of Free Trade being adopted in its entirety. That policy, although rejected by other nations, would be adhered to by this country. So what cannot be cured must be endured; consequently, instead of sighing and groaning over large importations and low prices they must manfully face their difficulties, with the full determination of overcoming them; and no doubt they would overcome them if they pursued the right course with energy and perseverance. That course must be patent to all—viz., to improve the quality of their cheese, and to reduce the cost of production by economising labour and increasing the yield of the land. As regarded the improvement in the quality of their cheese, the bulk was said to have deteriorated greatly of late years, and it had certainly lost the market of some districts where the demand had formerly been great. At Ipswich, for instance, and the country around that large town, Cheshire cheese had wholly disappeared before the produce of Holland and America. This deterioration was probably owing to high prices, which enabled cheesemakers to pay their way with inferior cheese. It was the second and not the first-class cheese which suffered so greatly from foreign competition. The price obtained was the criterion of quality. Those who did not receive a high price ought not to be above seeking instruction from more successful cheesemakers in order to avoid serious loss in the probable event of a still farther fall in prices; for he doubted whether they had yet experienced the full effect of foreign competition. Striking instances had come to his knowledge of the advantage derived from the course he suggested. To enable his tenants to judge accurately of the value and quality of their cheese by comparing the price they had obtained with that of others, he had ventured to beg his principal tenants to inform him in confidence what they had obtained for their best cheese last year. With the exception of one tenant they had all readily given him that information, and in support of their accuracy they had generally furnished him with the names of the purchasers. Without being guilty of a breach of confidence he might state for their benefit the substance of that information, five had received from 75s. to 80s. per cwt., fifteen had obtained from 70s. to 75s., seventeen from 65s. to 70s., and the cheese of eight had fetched less than 65s., including two who sold as low as 58s. and 56s. Some of these prices would probably have been rather higher had not the cheese deteriorated in quality in consequence of being kept back in the hope of a better market. This statement must clearly demonstrated two facts—first, that even in these times fine cheese realized a highly remunerative price; and, secondly, that a large quantity of the cheese made by his tenants was capable of great improvement. The average price was about 68s., and from that they would know that their best cheese if sold below that price last year, might be considered of secondary quality and not up to the mark. The opinion or excuse so often given was groundless—that the quality of the cheese depended principally on the nature of the land, and not on the skill of the cheesemaker. Prime cheese could be made on any soil, except perhaps peaty soil. Many cases could be given in support of this opinion, and a notable one occurs on an adjoining property, where at two farms, totally different as regards the nature of the soil, cheese of the finest quality had been made, and realised for some years as nearly as possible the same prices. With regard to the economising of labour, he did not mean that to be accomplished by discharging labourers, but by seeing that all were fully and profitably employed. Very much could be effected by the dairy arrangements in farmhouses being made thoroughly convenient for cheesemaking operations. The introduction of cheese

vats, ovens, lifts, and other appliances were recent improvements of great value to cheesemakers, and completely removed the grounds for the mistaken notion of draggery in cheesemaking. As to the remaining point in the produce of this county might unquestionably be increased to a vast extent. They themselves must know how greatly the production of his estate might be increased if every acre of pasture land that required it were properly drained with a liberal application of bone manure. To encourage this increased production, so necessary in these times, he proposed to offer to them bell-mouthed pipes at 3½ per cent. on the cost price to check waste, and also to supply bone manure at 5 per cent. to every acre of land properly drained. An experienced tenant had told him lately he was satisfied that land would return 13 per cent. on the outlay of bone manure, consequently the advantage to tenants of having this manure at 5 per cent. would be very great. He hoped therefore that the offer he made them would be generally accepted, and lead to an important addition in the production of the soil throughout the estate. On the luncheon table they would find Cheshire, Cheddar, and American cheese considered of the finest quality to be purchased in London. He had requested a small packet of the Cheshire cheese, sold retail by Messrs. Cadbury, of Broad-street, at 1s.4. a pound, to be given to each of them as a specimen to take home.

## THE FOREIGN CATTLE TRADE.

On Wednesday Jan. 1. there came into force certain important alterations in the rules which affect the importation of live cattle into England. In virtue of the Contagious Diseases (Animals) Bill of last year—a measure, it may be remembered, which was the most hardly fought piece of practical legislation of the whole Session—the Privy Council acquired the power of issuing new Orders in this matter, and this power has now been exercised.

The new Cattle Orders, though they have been in force but a few hours, have been published for fully a month. They have excited violent comment and opposition from a few persons, but it is remarkable that neither in Parliament nor out of it has any politician of eminence meddled with the subject. The extreme opponents of the Government have seen in it, as they would probably see in a republication of the proclamation against vice and immorality, evidence of turpitude and of dark design. The extreme partisans of the Government have been chiefly occupied with other matters, and, beyond a few casual hints that the measure does not go quite far enough, have not dealt with it. The subject of beef is, however, personally interesting to Englishmen, and perhaps we, who are committed neither to the depreciation of the Government nor to their justification, may be in better case than some of our contemporaries for the discussion of the matter. To rob an Englishman of his beef would indeed be grievous, and the principal thing that we have to look to is the question whether such a terrible robbery as this is likely to be committed.

It may, perhaps, be taken for granted, that not many people have followed with care the somewhat uninteresting history of cattle disease in England; but everybody has some remembrance, more or less dim, of the great pestilence of the last decade, when cattle died by thousands; when the staple industries of whole counties, such as Cheshire and Somersetshire, were threatened or destroyed; and when the price of meat almost at a bound reached the limit from which it has since shown no very striking tendency to recede. Since that time constant efforts, spasmodic and partial, but well intentioned, have been made to deal with cattle disease. The subject has been enveloped in a perfect hailstorm of orders, regulations, and what not. On one day such and such a beast might be imported, on the next day he might not. A drove of cattle crossing half-a-dozen counties on their way to market found the regulations in force different in each, and were extremely lucky if they reached their destination without subjecting the hapless owner to multiplied and complicated penalties. Meanwhile scientific men sought over the nature, symptoms, and treatment of rinderpest, pleuro-pneumonia, foot-and-mouth disease, as only scientific men can fight. In the controversy a few things at last emerged. It became clear that certain European countries, Russia and Poland in particular, were foci of disease, and that the system of allowing

free import, and then coming down upon infected herds and slaughtering them, was most wasteful and uncertain. At the same time, experiment showed that the dead meat trade could, if need were, be enormously extended, and that this trade would be made the cheapest and most effective way of bringing foreign beasts to English tables. Lastly, it became obvious that English farming was going through a serious stage of transition; that the future prosperity of the farmer and the profitable cultivation of English soil required the increase of stock-raising generally, and that this increase could hardly be secured unless the danger of imported foreign disease were warded off. It was these considerations which led to the introduction of the Bill of last Session, and it was these considerations which led to that measure being passed after the worst that could be said had been said against it. The Orders now issued prohibit importation of live cattle from Russia, Poland, Roumania, and other homes of infection altogether, but allow it from the countries stretching from Jutland to Cape Finisterre under certain definite conditions. These Orders have nothing to do, it should be said, with the recent hardship suffered by Lady Pigot, Mr. Macdonald, and other cattle-breeders in the matter of their Paris "exhibits." That, though a bad business, is an old affair, and quite independent of the new regulations.

It is complained of these regulations, first, that they unduly favour the country at the expense of the town; secondly, that they savour of protection; thirdly, that they will raise the price of meat. If these charges, or any of them could be sustained, the case would be a grave one. But, in the first place, it remains to be proved that the price of meat will be raised by the new Orders one farthing on the stone, and if it be not so raised it is not clear what the "expense of the town" means. The present sources of supply are not touched by the Bill. If we have been in the habit of receiving Russian cattle disguised as German, it is quite time that a stop were put to the practice; and if, as the opponents of the Orders tell us, the internal Customs' Regulations of Germany are stringent as to cattle disease, it is quite clear that German cattle will have no difficulty in gaining entrance into England. Ireland and America are not touched at all. Denmark, France, Spain, and other countries whence a considerable cattle supply is, or might be, derived, will have the same facilities, to all intents and purposes, that they now have for feeding Great Britain. Beyond this there is the certainty that the very smallest rise in the price of meat would result in the organisation of the dead meat trade from America and from Central Europe on an enormous scale. Lastly, and most of all, there is the stimulus given to home production. This it is which seems to have excited most wrath, from some sort of confused idea that this stimulus was protection or class legislation. Certainly it is protection in one sense—the same sort of protection which forbids a man to go about the streets or travel in public vehicles when suffering from infectious disorders. But this is scarcely protection of the kind which the objectors mean. Nobody but blunderers or interested persons can confuse a sanitary condition with a prohibitive tariff. The intention of the Orders, so far as farmers are concerned, appears to be simply that they shall receive the same police protection in the discharge of their business that every tradesman receives. American calico and German linen can be imported into the United Kingdom without let or hindrance. But if an American or German agent came here to set on fire our manufactory, that agent would come under the operation of the law. The same is the case with the meat. The healthy beast is welcome to come and lower prices if he can by his benevolent competition, but the unhealthy beast is not welcome to come and infect a hundred of his fellows here and so raise the price instead of lowering it. It is for the advantage of the whole nation that the food-producing capacities of the country should be developed to their utmost. They cannot be so developed while infection is allowed to discourage the farmer from making the most profitable and food-producing use of his land. This, and nothing else, appears to be the spirit in which the new Cattle Orders have been framed. Experience will very quickly throw more light on their working than all the *a priori* argument in the world. But meanwhile it seems foolish to condemn them on no better ground than an altogether mistaken view of economic terms and a jealousy of a certain interest. Let the farmers by no means be benefited at the

expense of the nation, but if the nation can be benefited through the farmers, there is surely no need to quarrel with our stops because it happens to kill two birds.—*Examiner*.

## AN APOLOGY FOR STRIKES.

"Erica," writing to the *Times*, in reply to a letter from Mr. G. P. Bevan, condemning all strikes, says:—

Though it is impossible to do otherwise than agree with Mr. G. Phillips Bevan in condemning the strikes of the past year, few, I apprehend, will carry their agreement to the point of saying that strikes generally "are acknowledged on all sides to be barbarous, costly, and suicidal." It is one thing to censure this or that strike in particular; another, and a widely different thing, to stigmatize the whole policy of strikes in the way in which Mr. Bevan has stigmatized it in the passage quoted above.

Strikes were called into being by an urgent necessity, and they have most undeniably served the purpose which led to their existence. If anyone doubts their having materially contributed to the amelioration of the workman's condition, let such a person contrast the present with the past and explain how it is that the employer and the employed now meet on a footing of comparatively equality; how it is that in the "higgling of the market" over the rate of wages there are now two parties to the bargain, where before there was but one?

It must be borne in mind that the *raison d'être* of strikes is just this—to secure perfect competition between employer and employed. Many circumstances combine to place the isolated working-man at a relative disadvantage in his dealings with his employer. The number of those wanting to be employed is large; of those wishing to employ small. The former are poor; the latter are rich. The employer would, therefore, dictate his own terms were it not for those very strikes Mr. Bevan declaims against. But the dread of strikes is a weight thrown into the workman's side of the scale, and it tends more than anything else to adjust the balance equally. There is a definite cost to the master in all strikes; and when a strike is a probable contingency, this cost enters into his calculations, and is an important factor in settling the terms of the contract he makes with his men. This factor operates entirely in favour of the workmen, leading the employer to defer a reduction and hasten a rise of wages in cases where heretofore an exactly opposite course has been pursued.

But besides influencing to a certain extent the rate of wages, strikes have been instrumental in raising the workmen from their ancient attitude of servile dependence and freeing them from the galling yoke that ignorance, fear, and blind obedience to custom had laid on them. Strikes have lessened the power of the employer, which would otherwise be oppressively great, and have increased the power of the workmen, which would otherwise be degradingly small. In short, they have effectually tended to substitute perfect for imperfect competition, and since the more competition there is (provided it be really effective on all sides) the better it is for the world at large; strikes must be said to have been extremely beneficial rather than "barbarous and suicidal." In saying that they have been on the whole advantageous to the community, I do not preclude myself from admitting that many have been wasteful and mischievous, neither do I attempt to deny that most of those that occur now a days are utterly unjustifiable. Nevertheless I insist on the plain fact, that the policy of strikes taken in its general aspect is not that foolish and pernicious policy Mr. Bevan and others declare it to be. As one of the contributors to the Cobden Club Essays (1872) justly enough remarked, a coalition to cease working is a "necessary last resort in a controversy with employers." So, when Mr. Bevan challenges the advocates of the working men to devise some better means of meeting discontent than by this system of strikes, he must be met with the answer, that in as far as the discontent is based on reasonable grounds, no better expedient could be devised. In refusing to labour, the workmen only do what is done daily by merchants. They withhold something from the market till it will fetch the price which the owners think fit to set on it.

But in so far as there is really no ground for discontent strikes are fraught with evil, and it would be indeed well if they could be prevented. It seems to me that ignorance of

the circumstances of their trade is often accountable for much of the mistaken action of the working-men. If judicious attempts were made to increase their knowledge on these points, as well as to teach them all that is involved in the industrial organisation of which they are part, the number of strikes would sensibly diminish. But at present it seems to be more the fashion to rate the working classes for acting in defiance of economic laws, than to take any measures for instructing them in the elements of that most useful science—political economy.

## ANIMAL AND VEGETABLE FOOD.

Mr. F. King, of Caterham Valley, writes to the *Times* on the above topic as follows:—

In your article on the Registrar-General's return showing the increased mortality during the winter quarter you state "that the power of resisting cold depends upon the amount of heat-producing food consumed and digested;" but I doubt whether one person in a hundred knows enough of the chemistry of food to be aware what food does produce heat in the body. The flesh of animals has no heat-producing power; it contains no carbon (unless fat is mixed with the flesh), yet it has been of late years the custom to consume more and more meat, rendering it almost impossible to consume enough of the carbonaceous foods necessary to keep up the heat of the blood. Because meat is known to be a nitrogenous or muscle-forming food, the idea seems to be that the more of it we consume the better. We might as well say that because iron forms the muscle and sinews of the steam-engine we ought to put as much iron as possible in the furnace; to keep it in action. The great bulk of the work required of our bodies is in replacing the perpetual loss of heat through our heating the air by the surface of our bodies and by the heated air we emit at every breath. If we do not take enough carbon in our food, we burn up the fat that is stored up in our bodies, and as long as this lasts we may only suffer that loss of weight which occurs in most persons during the winter; but if the supply of carbon fails, the blood becomes in a condition ready for any of the diseases incident to blood poisoning.

When I first read, some years ago, that people gained weight during the summer and lost it in the winter, I thought it quite contrary to reason; but experiment on myself and others has confirmed it. When we consider that nearly half the human race exist without consuming flesh to any material extent and that the Chinese coolie will upon rice do work that would astonish the English navy, we must admit that flesh is not a necessary diet—it should be looked upon as a luxury, and a dangerous one if it displaces in a cold climate the more important carbon food.

When our last Arctic Expedition sailed I was astonished to find that the ordinary meat ration was to be doubled, and, considering that the climate would require the burning of a far larger quantity of carbon than usual, I was quite prepared to hear of the men's health giving way, as the extra meat ration necessarily displaced the more important carbon foods. Scurvy resulted and was ascribed to the absence of lime-juice on the sledging expeditions; yet the inquiry showed that in previous sledging expeditions, carried on for much longer periods, lime juice was not used, yet the men escaped scurvy.

From careful consideration of the dietary which it appears to me a study of the chemistry of food indicates as correct, checked as all such deductions should be by observation of the dietary of other nations, I consider that far too much meat is eaten in this country at the present time for health, and that many of the diseases—such as diphtheria, typhoid fever &c.—arising from blood poisoning are primarily due to improper diet, especially to the insufficiency of carbonaceous food taken; and, further, that the craving for alcohol—a hydrocarbon quickly burnt in body—is greatly due to the insufficiency of carbon in the food, as such craving is much less among the nations where the diet is mainly carbonaceous.

Dietary science has been very little studied in this country. The weight of carbon required to produce a certain duty in a steam engine is well known; but I believe the weight of carbon or of the other necessities (nitrogen and mineral salts) required to keep the human engine in full duty has never been calculated; yet such a calculation ought not to be difficult, and the deductions arising from it would be of the greatest value in keeping our bodies in health.

## THE HARVEST AT HOME AND ABROAD.

The *Economist* derives the following remarks on the results of the harvest of 1878 from foreign sources. The production of corn during the year 1878 was estimated as follows in hectolitres (the hectolitre=100 litres=22 gallons):—France, 82,500,000; Russia, 78,000,000; Germany, 46,000,000; Spain, 40,000,000; Italy, 38,000,000; Austro-Hungary, 40,600,000; Great Britain, 37,000,000; European Turkey, 14,000,000; Roumania, 13,000,000; Belgium, 85,000,000; Portugal, 3,000,000; Holland, 1,250,000; Greece, 1,750,000; Servia, 1,400,000; Denmark, 1,000,000; Sweden, 850,000; Switzerland, 480,000; Norway, 100,000; other countries of Europe, 200,000; together, 406,630,000 hectolitres. United States, 120,000,000; Algeria, 7,500,000; Canada, 6,000,000; remaining countries out of Europe, 3,000,000; in all, 553,630,000 hectolitres. If we estimate the production of corn in a good average year at 567,950,000 hectolitres, Europe alone shows a deficit of above 20 million hectolitres, which, when the harvests of other countries is taken into consideration, is diminished to 14,320,000 hectolitres. As, however, the consumption of various States is decidedly larger than what is produced in an average harvest, an import of corn from 65 to 67 millions hectolitres at least will be necessary for the States of Europe this year. In this import the share of Great Britain will be 35 millions; France, 20 millions; Norway, 8½ millions; Italy, 3 millions; Holland, 1,800,000; and Belgium, 1½ million hectolitres. How different the proportions in the different States are, may be seen in this, that France has sufficient with an import of 20 million hectolitres, that is to say, with what brings its requirements up to an average, while Great Britain, on the other hand, must import 35 million hectolitres, in spite of an average harvest. Russia, again, although she may not have an average harvest, can export nearly 17 million hectolitres, but does not herself need so much as 65 million hectolitres of corn. The export of corn from Austria-Hungary and Roumania together is estimated at 8½ millions. The extra demand for corn in Europe amounts to about 65 to 68 million hectolitres; this would naturally take some time to cover, if it is taken into consideration that from the collective export of Russia, Austria, Hungary, Roumania, and some other States together, 25 to 27 millions of corn flows into those States of Europe which require it. There remain, then, about 40 million hectolitres to import. These 40 millions will be, it is supposed, almost entirely supplied from the United States; the prices of corn there remain normal, and are not likely to be screwed up to such a point through an unreasonable rise that Europe will be forced partially to circumscribe her requirements.

**PROPOSED CHEESE FACTORY.**—An adjourned meeting of agriculturists was held at Kellaway's Railway Hotel, Highbridge, recently, to consider the advisability of establishing a cheese factory in the neighbourhood, similar to those in Derbyshire and in America. Mr. H. J. Kinsey presided, and introduced Mr. J. Oliver, of West Harptree, near Bristol, who has had a great deal of experience in cheese factories. He explained at some length the management of these establishments, and estimated the cost of building and fitting up one in the neighbourhood sufficiently large for 1,000 cows at £3,000. He offered to provide plans and superintend the fittings, and afterwards to manage it and guarantee for the first year 6½d. per gallon for the milk. He believed subsequently, after the factory had established a good reputation, he should be able to offer 7d. or 7½d. The factory would pay 5 per cent. interest by way of rental. The Chairman explained the suggestion was that a joint-stock company should be formed, and the capital required should be raised in shares of £10 each. He submitted a resolution to the effect that it was desirable to establish a cheese factory in the neighbourhood, and this was agreed to, after which a committee was formed to ascertain what shares would be subscribed for.

**LEAD POISONING AND AMERICAN CLOTH.**—The *Medical Press and Circular* recently called attention to the danger of using American cloth in perambulators, and reported several cases of lead poisoning from its use. In a piece of this glazed material which was analysed, only 6 inches square in measurement, an amount of lead corresponding to 64½ grains of the carbonate, or "white lead," was found.



## MR. SHAW LEFEVRE, M.P., ON IRISH LAND TENURE.

Mr. Shaw Lefevre, M.P., has written a preface to a pamphlet on the working of the Bright Clauses of the Irish Land Act, in which, as a commentary on the reports of the Irish Land Tenure Committee, of which the hon. gentleman was chairman, he recounts the operations of the committee and states his views as to what should be the action of Parliament thereon. Referring to the clauses in the Irish Church Act, 1869, facilitating the acquisition of Church lands by the Irish tenantry, the hon. gentleman says:—"The success of these clauses, under which 4,000 tenants had become owners in fee of their farms, subject to a charge which will be paid off in a few years, was in striking contrast to the almost total failure of the clauses in the Land Act, and raised a strong presumption that there were causes operating against the working of the latter which ought to be removed. The inquiry (the Land Tenure Committee) was one which should have been initiated and carried through by the Government, for when the intention of Parliament had been clearly pronounced in those clauses of the Act, and the people of Ireland had been led to believe that the object of them was one which the Government had at heart, it was to be expected that the Government itself should investigate the causes of failure and endeavour to carry out the intentions of the Act. No such attempt, however, having been made or proposed by the Government, it seemed to me that the matter was ripe for enquiry." Summing up the work of the committee appointed on his motion, he says:—"The committee, therefore, recommended that some properly constituted body should be entrusted with sufficient funds to enable them to purchase suitable estates or parts of estates when offered for sale, with a view of afterwards selling to as many of the tenants as, with the aid of advances through the Board of Works, may be able and willing to buy, and disposing of the residue (if any) at such times and in such manner as they think would be most productive." The report as adopted, he contends, was practically in accordance with his own conclusions, as expressed in the report submitted by him to but rejected by the committee, but was wanting in the explanations drawn from the previous history of the question, and from the evidence given by the witnesses before the committee, which in the hon. gentleman's opinion "were necessary in order to justify such conclusions, and to present them to the House of Commons and to the public in the most favourable light." Mr. Shaw Lefevre thinks that "a certain disadvantage has already accrued to the question from its being presented in this bald manner." As the report was not laid before Parliament until the middle of June, the hon. gentleman holds that it was obviously impossible that any action should be taken on it in the remainder of the Session. As a justification of the short Bill introduced by the hon. gentleman to protect the tenants of the remaining residue of the Church property he states:—"The evidence before the committee showed that the Church Commissioners had sold the Church property to as many of their tenants as were in a position to effect purchases, and that there remained in their hands a considerable number of small holdings, the residues of properties of which the greater part had been sold to tenants, residues often much dispersed and honeycombed as it were, and therefore not very eligible properties for purchase by the better class of investors. It was in respect of such residues that Judge Flanagan expressed his alarm as to the class of purchasers into whose hands the small tenements were falling. 'Such landlords,' he said, 'I look upon as about the greatest curse you can inflict upon the country. They consider the matter as a mercantile transaction in the extreme sense of the term, their whole object being to extract from the unfortunate small tenants, who have lost the protection of their former landlords, the very highest penny they possibly can. I think that unless you protect the tenants of such residues by giving them fee farm grants you would be doing an amount of injury which would be simply incalculable; I say deliberately that a greater curse cannot be inflicted upon the tenantry in Ireland than a system of selling property which would leave the residuary tenants in the power of such men; they are the most merciless, the most avaricious, and the worst class of landlords that can by any possibility be put over an unfortunate body of tenants.'" The fate of his measure directed to prevent the evils indicated

by Judge Flanagan leads Mr. Shaw Lefevre to fear that we cannot expect much advance in present circumstances unless the pressure of public opinion is strongly brought to bear in favour of the question; but he adds, "I cannot, however, believe that a Government which in 1877 so cordially assented to the appointment of a committee to report whether any further facilities should be given for promoting the purchase of land by occupying tenants will in 1879 repudiate the responsibility which is now cast upon them, will neglect the unanimous expression of the committee upon which three of their members sat—'that it is very desirable that further facilities should be given for the purchase by tenants of the fee simple of their holdings,' and will not submit to the House of Commons some measure for such a purpose."—*Times*.

## AGRICULTURAL ENGINEERS' ASSOCIATION.

A special meeting was held on the 6th ult., Mr. James Howard in the chair.

Mr. Jules Joubert and the Hon. Mr. Combes, from New South Wales, attended the meeting by invitation, to confer with the members upon the arrangements for the Sydney Exhibition. After having answered many questions as to sites, space, building, and other matters, Mr. Joubert, who is returning to Sydney next month, undertook to bring under the notice of the authorities at Sydney the views expressed, also the following resolution passed unanimously upon the motion of Mr. SAMUELSON, and seconded by Colonel GRIF-FIN (W. A. Wood and Co.):—

"That this meeting of members of the Agricultural Engineers' Association would desire that there should be no trials, or awards of prizes, or other honorary distinctions for agricultural machinery manufactured elsewhere than in the colony."

It was also moved by Mr. NICHOLSON, and seconded by Mr. COLEMAN:—

"That the Council of the Association be a Committee of Consultation to confer with the Commissioners as to allotment of space, and any other matter upon which advice might be sought."

Before leaving, Mr. JOUBERT reported that the Commissioners have opened an office at No. 5, Westminster Chambers, London, S.W., to receive applications for space and the transaction of business in connection with the Sydney Exhibition.

The meeting then proceeded to consider the question whether any concerted action should be taken to obtain an increase in the hours of labour. After several members had stated their views, it was decided not to proceed further with the discussion of the subject.

A letter was read calling attention to the arrangements made by the Bath and West of England Society and the Devonshire Agricultural Society for holding their respective shows in Devonshire within a fortnight of each other. After a conversation upon the subject, the general opinion appeared to be that as both shows were to be held at dates so close to that of the Royal Show in London, to which visitors from all parts of England would be attracted, it was not desirable to exhibit at any show held prior to the Metropolitan.

The PRESIDENT stated that his offer to give evidence before the Commissioners appointed by the French Government to inquire into and report upon the Tariff question was received too late; but that the President of the Commission had invited him to put his views upon the subject in writing, which he had done. He then read a copy of the letter he proposed to send. He also proposed to send to our Ambassador at Berlin (Lord Odo Russell) a copy of the letter.

**BACON.**—The principal firms of Wiltshire bacon curers have issued a circular calling the attention of farmers and others to the public aversion to fat and heavy bacon, and stating that as Irish feeders are now turning out well-furnished pigs of light weight, small bone, and full of lean, they have daily evidence that if feeders do not take decisive steps to meet the requirements of consumers by introducing a breed of pigs yielding more lean and less fat than the present "Berkshires," the demand for English bacon will be very much curtailed, and the value depreciated.

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## THE POLITICAL PARTIES AND THE FARMERS.

### A CHALLENGE AND A RETORT.

In the course of a speech delivered in support of the candidature of Sir T. Fowell Buxton previous to the North Norfolk election,

Mr. FORSTER said we have now had a Tory Government for four years, and that is a period long enough for the country to discover what the Government does and what it does not—what it does abroad and what it does not do at home. Now is the time for the constituencies of the country to come forward and say what they think of the acts of the Government. Recently we had an election in Bristol, one of our most important cities; then as to the boroughs which are still very important, we have had a contest at Maldon, in a county not far off; and now the opportunity has come for you, the men of North Norfolk, to give your verdict. We have in the division a most important report, with great interests, and we also have the farmers of North Norfolk. I have read the speeches of Mr. Edward Birkbeck, the Conservative candidate, and also those of several of his supporters, with great attention, and what has struck me more than anything else in those speeches is the way in which the speakers have passed over and ignored all home questions. One would suppose from what they say, or rather from what they do not say, that there is not a home question in which either the men of Yarmouth or the farmers of North Norfolk are interested. Let us take the farmers. Here is a fine opportunity for them to express their views and state their wishes. We have a Government professedly composed of farmers' friends, and a Cabinet with only one borough member in it. Now is the time for farmers to say either "You have given us all we want," or, "There is something more that we want." Judging from these speeches, I should say that not merely are the merchants and traders of Yarmouth in a position which is enjoyed by scarcely any other large town in England—that of being perfectly satisfied—but I should say that the farmers are also perfectly satisfied. Am I right in supposing they are perfectly satisfied? If we look upon Norfolk as being composed of almost typical constituencies of farmers, I should say my friend Mr. Clare Sewell Read is a typical and most excellent representative of the tenant farmers, alike for knowledge, for experience, for sound clear sense, and for sincerity. He has only one fault that I know of, and perhaps it is rather a misfortune than a fault—it is that he does not sit on our side of the House. Sometimes when I listen to him I wonder he is not on our side of the House, and I am inclined to think that he himself shares in the wonder. Is he quite satisfied? If you merely read his speeches now, you would say he was; but I doubt it. I remember his resignation of the office he held—a most creditable act of Mr. Read. He resigned because he was not quite satisfied with what the Government did about the Cattle Bill. I observe that in a speech to his constituents, when speaking of the last Cattle Bill, and he remarked how the Bill was improved in the House of Commons, how he had something to do with its improvement—which he had—he said something to the effect that the Irish farmers should have the same restrictions placed upon them to prevent their exporting diseased cattle to England as the English farmers had to prevent others sending cattle from one place to another. It is quite true that Mr. Read showed great independence in the manner in which he insisted that Ireland and England should be put on an equal footing, but when I see him I shall tell him it was too bad he did not mention that we on the front Opposition bench, and perhaps the humble individual who is now addressing you, did our utmost to help him on that occasion. We know what Mr. Read's views are on county government. He has stated them very clearly and with great independence in the House of Commons; but we hear nothing about county government in this election either from Mr. Read, Mr. Edward Birkbeck, or any of his supporters. And why? Because Mr. Read knows very well, and has probably told his friends, that it is of no use expecting any real measure of county government or reform from this Ministry. Mr. Read might add,—“I am sorry for it; I have done my best, but we can't get it, and therefore we had better say nothing about it.” Home questions have had the “go by,” and Mr. Read has confined him-

self to defending the foreign policy of the Government and making a sensible remark, for which I thank him, about the manufacturers in the North, of whom I am one, calling out for Protection. As I am coming into a farming constituency let me say one word about county government reform. It is a most important matter. In fact, of all the home questions pressing for decision, it seems to me of most immediate importance. Anybody who attempts to understand the question will find himself struck with two facts—first, that England is almost the only—I don't know whether it is not the only—civilised country in the world in which there are no rural municipalities. We have nothing approaching to self-government in our villages, and yet they have it in France, they have it in the United States, they have it in Canada, and they have it in most of our colonies. The next fact is that the great principle which underlies English politics and English political arrangements is that taxation and representation should go together; that whoever pays taxes or rates should have something to do with the appointment and choosing of the proper persons to spend them. My experience leads me to believe that the want of these rural municipalities blocks and prevents reforms in a way which it is hardly possible to estimate. But it is quite impossible to meet this difficulty and to have these municipalities unless you thoroughly and fairly look the other question in the face, and are prepared to combine representation with taxation and to give farmers and occupiers some sort of voice in the distribution of the rates as well as the county justices. Mr. Read knows that, and he has stated it over and over again. But you will not get it from the present Government. They have too much of the old Tory in the n. Lord Beaconsfield, if he were ten years younger, might educate them to give it, but there is no chance of his doing it now. If you are to secure a good measure of country reform, you will have to get the help of the Liberal party. Therefore, Sir T. Fowell Buxton and not Mr. Edward Birkbeck must be returned to the House of Commons for this county. There are many other home questions to which this applies. The Government showed they thought something was necessary to be done with regard to agricultural holdings, but what they passed is pretty generally acknowledged to be mere mockery and a sham. There is another question of immense importance, and it is as important to farmers and men of small property, shopkeepers, and the higher class of artisans living in villages, as it can be to anybody; this is that we should make the purchase and sale of land as easy as possible, so that there can be the freest possible transfer of land from one man to another. It is very difficult to think of anything which more nearly concerns the farming interest than such a measure as this, and hardly anybody can doubt that you are not likely to get this from the present or any other Conservative Government.

### In addressing a meeting at Yarmouth,

Mr. C. S. READ replied to Mr. Forster as follows: Mr. Forster was kind enough to say a few complimentary and friendly things of me. I am extremely indebted to him for what he said, and I think it proves, coming from a statesman of his ability and independence, that I am not the extremely bad lot that some of my North Norfolk friends have tried to make me out to be. Mr. Forster was good enough to say I had only one fault, and that that was hardly a fault, but was most probably a misfortune—that I sat on the wrong side of the House of Commons. He wanted to know how it was I sat on the Tory side and not on the Liberal side of the House. I will tell him and you. As a tenant farmer, I say we never have had any help from Liberal Governments since I have been in the House. I say most advisedly that the Liberals have shown that they do not care a straw for the agricultural interest. They have never passed any legislation for our special benefit. Mr. Forster also said I quitted the present Government, and deserved credit for my independence. It is rather a remarkable thing that I quitted the present Government on account of an act of Mr. Forster himself. There is no mistake about it—it was upon the question of cattle diseases. Mr. Forster when in office passed an Order in Council that we farmers in England and Scotland were to slaughter all our cattle that were attacked with pleuro-pneumonia, and did not extend the order to the great breeding districts of Ireland. I said it was hasty, and that in my opinion it was a great blunder on his part that Mr. Forster did not embrace the whole of the United Kingdom in this order. Mr.

Forster went out of power and left behind him permanent evils who wrongly advised the present Government, and said that what I desired could not be done. But it has been done. The present Government found out they had been wrongly advised, frankly acknowledged their mistake, and passed an Act last year which will, I trust, affect not only the cattle of England and Scotland, but will also, I hope, restore health to cattle in Ireland as well. And why do we farmers desire the cattle of England to prosper? Of course, in the first place, that we may have a certain amount of profit; but we also wish, on the other hand, that the great masses of the industrial population of this country may have meat at a reasonable price. Then Mr. Forster also said that I lectured in a speech or two in the course of this election that I thought the bill which the Government had brought in for the purpose of staying foreign diseases among our stocks had been greatly improved by the House of Commons. I said exactly the contrary, and said I liked the Bill which the Government brought in a great deal better than I did the Act which the House of Parliament passed, and instead of my saying that the House of Commons improved it, I distinctly stated that Mr. Forster, and those gentlemen who acted with him, had done very much to injure the bill and to make it a nullity. Another point Mr. Forster made was this. He said that he had not heard a single word mentioned by me or by Mr. Birkbeck about county boards. Now, I fancy that Mr. Forster is so engaged in vindicating his own independence against the caucus got up against him at Bradford—the last imposture from America, which would bind members of Parliament hand and foot and make them only the delegates of an association committee of electors—that he could not have read Mr. Birkbeck's address, or could not have read his speeches, because I know that Mr. Birkbeck in three speeches, at the delivery of which I was present, did certainly mention the county boards question, and it also occupies a paragraph in his address. Mr. Forster also said that it was a question more seriously affecting the rural districts, where there are no municipalities, than the towns, and that if you wanted a good County Boards Bill you must ask a Liberal Government for it. Then why did the Liberals not give it us before? They have been in power twenty-five years out of the last thirty but never thought of giving us this boon before, and I think but if they came into power again they would have some more sensational legislation instead. This is a good practical piece of legislation, and I hope it will be passed. What we really want in county boards is not to have a lot of talking, glib people, who like to hear themselves talk, and fancy to be like it too, which generally speaking they do not, but to want some good business men sent by the different boards of parishes to transact the business of a county in conjunction with the magistrates. I think this would strengthen the local authorities very considerably, but I contend that the Liberals during the last thirty years have done all they can to weaken the hands of local authorities by binding them hand and foot and handing them over to the Local Government Office in London. If that policy is continued, I am quite sure that the local government of this country will be altogether a sham and a delusion. One word with regard to the Agricultural Holdings Act. [A VOICE: "The school boards."] Yes, you have to thank Mr. Forster for the school boards. You have to pay for, and you have not done paying for them yet, and you will not for the next fifty years, but you have to thank Lord Sandon for not making compulsory school boards over the kingdom. Now, with regard to the Agricultural Holdings Act, Mr. Forster told you that the present Government had not done well in passing an Act nobody cared about. Well, I say if the Government of the day have not done all farmers wished for in this matter, is it not a well-known fact, patent to you all, that the Liberal Government never relieved farmers' burdens with the tips of their fingers?

**HARD ON HIM.**—A lazy physician, who had been out looking, on coming home complained that his luck had been very bad, and wound up by saying, "I didn't kill anything." That's because you didn't stay at home and attend to your private business!" spitefully retorted his wife.

**HIS PROPENSITY.**—A gentleman was examining an electric lamp and commenting upon its fine quality. "Yes," said a person present, "he fancies everything he sees." "And," said another, "he is inclined to seize everything he sees."

## BANBURY HORSE SHOW.

The horse show is a fitting prelude to the Twelfth Fair, but perhaps it never took place under such disadvantages as those of Jan. 13, when that part of the Horse Fair devoted to the show had to be divested of snow, and ashes laid down to prevent the horses from slipping. The judging commenced shortly after ten o'clock with the cart horses, there being fifteen entries in this class. We have seen a better display of cart horses. The favorite seemed to be Captain, the property of Mr. W. Bacchus, of Hornton Grounds, which carried off the first prize and around which a levee was held after it left the ring. Mr. H. Mawle, of Sibford Gower, took the second prize. Mr. W. E. Bacchus was commended for Drummer, a brown gelding. The class, as a whole, was not up to the average. Class 2, cart mares, brought out some good useful animals, and the first prize went to Mrs. Andrews, of Evenley, Mr. J. Kilbey, of Marston Hill, being commended. The cart colts were a very fair class, and Mr. Geo. Marshall carried off premier honours with a nice looking bay colt. Mr. Marshall was also awarded the extra prize of £10 for the best cart colt or filly. Mr. J. Hawkes, of Farnborough, was commended in the colt class, and Mr. J. E. Parsons, of Charwellton, had first prize for the cart filly under four years old with Depper, whose dam of the same name has secured a reputation not only in this neighbourhood but in Scotland, and taken a large number of prizes. The colts and fillies under two years old were a very good show, and Mr. E. Messenger, of Chippen Warden Grange, had the first prize with Flower, a promising roan, Mr. S. W. Underwood, of Astone, being commended. There were eighteen entries in the hackney class, and the first prize went to Rapert, a beautiful bay gelding, belonging to Mr. T. W. Berridge, of Radway. Mr. J. Malsbury, of Bloxham, being commended. The colts were not up to what we have seen on some previous years, but there were several capital animals amongst those exhibited. Mr. D. Hopkins, Sherington, secured the first prize, and Mr. S. Gule, of Chalford Oaks, was commended. There were eight entries for the harness gelding or mare class, and Mr. J. Bliss, of Little Rollright, carried off leading honour, Mr. A. Bodlington, of Clifton, securing the white ribbon. The classes for hunters filled well, and for the best animal up to 12 stone 7lb. over five years, the first prize went to Mr. J. M. K. Elliott's Reprobate, an animal which was greatly admired, Mr. E. Knott, of Penny Compton, being commended. Mr. R. Hall, of Cottenham, secured the blue ribbon in class 10, for the best hunter up to 12 stone 7lb. under five years, Mr. Samuel Berridge, of Drayton, being commended. Mr. James Bliss was first for the best weight-carrying hunter, and Mr. J. Irens second. This was a capital class. The extra prize of a cup, value £23, for the best hunter in the three classes was awarded to Mr. Elliott for Reprobate. Owing to the state of the weather, there was no jumping, but in the competition for the extra prize the animals were put through their paces, in a field on the Oxford-road.—*Banbury Guardian*.

**THE IRISH LAND QUESTION.**—The O'Donoghue, M.P., attended a special meeting of the Kerry Tenant Defence Association on Saturday, January 23, and delivered a long address on the land question. He stated that the glorious object of the association was to obtain for the Irish people secure possession of the soil of their own country, and strongly advocated the cardinal principles embodied in Mr. Butt's Bill, having for its object fixity of tenure at fair rents and right of free sale and of pre-emption by the occupier. The Irish people, he said, were of one mind on the question, and would insist on the unqualified acceptance of these points. Any settlement of the question which was not based upon these principles would be absurd, and they would not be diverted from the pursuit of their object by the sneers of their adversaries. He referred to the proceedings of the Committee of the House of Commons which inquired into the working of the Bright clauses as the most important which had occurred since the passing of the Land Act, and with respect to that Act observed that the country owed a debt of gratitude to Mr. Gladstone, who in days to come would be looked upon as the pioneer of reform in the land laws, although he had been prevented by territorial influence from fully carrying out his intentions. A vote of thanks was presented to the hon. member for his services in supporting Mr. Butt's Land Bill.

## THE LAW OF DISTRESS.

The following is the principal portion of a paper read by Captain Delf at the last meeting of the Essex Chamber of Agriculture :—

The postponement of this subject I hold to be out of the question, for the growing intelligence in, and appreciation of, its great breadth, must exercise the minds of those upon whom any unjust law presses; and surely, if at any time, it is now, when every institution affecting the agricultural interest should be probed. I shall endeavour to put before you an outline of the law of distress, tracing its origin to feudal times, indicating its preferential character and injurious expansion, and at the same time pointing out the evils which it induces. It is well known to most of you that our neighbours North of the Tweed have a similar law, under the name of hypothec, which, although grievous enough, may be regarded as less reprehensible than the English law. The abolition of the Scotch law has been agitated for some time, and the period has arrived which points to the necessity of upholding justice by the repeal of the un-English law of distress. It will be necessary for me to define and comment upon the advantage—may I not say unfair advantage?—of the preferential interest which this law secures to the landlord, and while complying with this necessity, I trust that I shall be able, without prejudice, to state, and frankly to meet, various arguments by which the law of distress is upheld. It will be well to remember that agriculture has been so thoroughly revolutionised since the institution of this law that many reasons that might well have justified its origin have long ceased to exist. I find that the legal definition of the term "Distress" is "The taking without legal process cattle or goods as a pledge to compel the satisfaction of a demand, the performance of a duty, or the redress of an injury." There are many cases in which the law of distress can be enforced; but the limits of this paper compel me to treat only of that where the tenant is in arrear of rent of land hired. The power given to the landlord is very great, and at the same time so unfair is that power—although legal—felt to be by many landlords that, to their honour be it said, they refuse to exercise it, being convinced that it is not justified by the law of morality. As the law stands, no action, nay, no notice is necessary, for the landlord can, immediately the rent falls in arrear, notwithstanding any set-off which the tenant may claim, seize the property of his tenant, sometimes that of a stranger—as in the recent Duppa and Lake case, which, happily, for the reputation of English landlords, is of very rare occurrence—to ensure satisfaction of his claim for rent. I am not here for the purpose of wearying you with a tedious digest of the law of distress but it is necessary for my purpose to direct your attention to a few prominent points. The right to distress controls all tenancies of a fixed rental, irrespective of statute or agreement; this right holds good, so long as there are goods distrainable, for not less than six years; this right may be enforced notwithstanding the tenant's bankruptcy, although in that case it is only available for one year's arrear of rent, this right cannot be legally made after tender, nor before sunrise or after sunset. Some goods are exempted, while others are conditionally privileged, supposing there is sufficient to distress on besides. I may remark here that by statute many things not distrainable by common law have been rendered so, especially growing corn and thrashed corn or hay. A great number of minute and subtle distinctions control the application of the exemption; but speaking generally, all goods belonging to the tenant or the public upon the premises are liable, the place rather than the person fixing the right. The liability of agisting stock, or stock sent out to graze, under whatever conditions, is of long standing, and that the liability not only exists, but can be enforced, is proved by the case to which I have referred previously. Purchasers of growing crops from the tenants run considerable risk, as, even if paid for, the landlord can claim such crops. Those who sell on credit, or lend goods to a tenant farmer, do so at a greater risk than if a similar transaction were entered into with any other trader; farming is thus constituted a privileged, not an open business. The owners of expensive machinery, such as steam ploughs, thrashing machines, &c., would do well to remember that their property is liable. Farmers buying stock at a distant fair or sale should define the farm upon which such stock should rest while *in transitu*, for should

the drover unwittingly place them where rent is due and promptly needed, such stock is liable to forfeiture to satisfy the landlord's claim. Cases could even be named in which stock purchased of a tenant and paid for have been retained by the landlord. To state briefly a few points of interest as set forth in this law, and which all farmers should be cognisant of, a distress may be enforced by the landlord, his agent or bailiff, authorised by warrant; and even should a man distress without authority he can protect himself by a subsequent endorsement from the landlord; at the same time it should be remembered—and here comes in again special protection for the landlord—the landlord is not responsible for any unauthorised acts of his steward. Generally speaking, a distress must be on the land after the rent falls due, not divided, nor excessive, and, of course, on distrainable goods. The origin of distress is too far in the dim distance to be definitely fixed. Legal authorities speak of it as a feudal offshoot and substitute for forfeiture. Some idea of its remoteness may be formed when we remember that the Bard of Aron depicts Richard as inciting his troops at Bosworth by attaching the distressing of lands with the distressing of wives. We are told that the term distress had no pleasant signification in his day, and I think that you will agree with me when I say that the law would press much more severely in the present day if the ladies should be included in assets. This law is truly one belonging to the dark ages, and should be obliterated in civilised communities where Courts of Justice exist for the purpose of appeal. There are but few cases, so far as I know, in which the law can be taken into one's own hand, these exceptions being very wholesome ones. I may be allowed here to quote that substantial authority Blackstone, who says, "If individuals were once allowed to use private force and remedy for private injuries, all social justice must cease, the strong would give law to the weak, and each man would revert to a state of nature." With Blackstone's laws and reason were synonymous terms, but even this learned writer did not presume to justify the principle of distress while advocating the Act as beneficial in practice. He distinctly says that distress was intended for the benefit of landlords as being the shortest and most effectual remedy for compelling the payment of rent. What can be clearer than that distress had its inception, growth, and exercise for the promotion of the owner's interest? It is clearly contrary to the spirit of the age, being a class law, constituting the landlord as it does a preferential creditor as compared with others. It is notorious that the current of legislation has been persistently setting against the occupier for many years past and up to the present time. A statute so recent as that of 14 and 15 Vic., cap. 25, is an illustration of the persistent current of legislation in the landlord's favour. This Act rendered the growing crops seized under an execution, while remaining on the farm, liable for rent accruing after, and notwithstanding the sheriff's sale. We are told that, "In consequence of this Act, which was hurriedly passed for the benefit of the landlords, immediately after a decision to the contrary, the tenant's crops can only be sold under an execution for their value, minus the rent to which they may become liable and the costs of a distress; but the landlord may afterwards abstain from distressing, and so in effect benefit the purchaser *pro tanto* at the tenant's expense, after which he may sue the tenant for such rent, or distress upon his other goods for the amount." Allow me to direct your special attention for a moment or two to the advantage benefiting the landlord and to the disadvantage to the tenant. Distress is a prompt and inexpensive process; it is needless for me to urge how valuable these qualifications are, placing the landlord in a supremely preferential position. On the other hand, it is clearly seen how great a grievance is distress to the honest tenant, while the preference which distress provides is a gross injustice to the confiding creditor. It is difficult to estimate the injury that has been sustained by the traders of this country by the existence of this pernicious law, which, so long as it is in force, acts as a decoy. We know the somewhat tedious and costly process necessary for the recovery of ordinary debts; by contrast, how strikingly simple is the process conferred by this law upon the landlord in recovering a rent debt—it can be accomplished instantly, no warning, no action, no proof or declaration that it is necessary. Years since statutes were passed to curb the oppression exercised by lawless barons under cover of distress. Remembering this, is it to be wondered at if this law, which

is far more stringent and comprehensive now, is viewed with suspicion and disgust? The only endurable feature in the existence of the law is, that it must frequently call into exercise self-abnegation and moderation on the part of the landlord; but I think that you will agree with me when I say that a very much question the desirability of perpetuating the possibility—aye, the legality of perpetrating an injustice upon tenants and their creditors for the purpose of providing ground for self-denial. I have been frequently told, when speaking of this law, that the landlord's priority holds good for one year's rent only. This is fallacious even where other creditors have claims. The tenant may be several years in arrears—it is not often that a man declares his inability until long after he has passed the stage of 20s. in the £ as the limit of his ability to satisfy the claims of his creditors. Section 34 of the Bankruptcy Act, 1869, contains the enactment protecting the landlord's right in cases of bankruptcy and liquidation. As a great deal is made of this as an argument against any gross injustice in the law as it now stands, perhaps it is as well that I should quote the clause:—"The landlord or other person to whom any rent is due from the bankrupt, may at any time either before or after the commencement of the bankruptcy, distrain upon the goods or effects of the bankrupt for the rent due to him from the bankrupt, with this limitation—that if such distress or rent be levied after the commencement of the bankruptcy, it shall be available only for one year's rent accrued due prior to the date of the order of adjudication; but the landlord or other person to whom the rent may be due from the bankrupt, may prove under the bankruptcy for the overplus due, for which the distress may not have been available." The only reasonable conclusion that can be drawn from this clause is that distress does hold good for more than one year's rent even against creditors, supposing that the distress be made prior to the bankruptcy. It is quite within the range of probability that a tenant should, through a careless or too confiding landlord, or to take an extreme and dishonest case, a landlord prompted by an unworthy motive of improving his estate at the cost of others, allow his tenant to hold land for years without paying any rent, and, selecting his opportunity, may come down with a great swoop, and clear off all assets, including goods still unperfected, and cattle agisting, and even mauling the labourer and his hardly-earned wage. I may be answered that I am putting a strong case. It may be so, but still it is one in which the law would protect a man, if such could be found, who would act so cruelly.

Having endeavoured thus far to show the power and effect of the existing law, I proceed to deal with some of the arguments which are urged in justification of distress, and to test their worth. It is said that the soil being the property of the landlord, the crop or stock have been appropriated to the owner as security for the rent. Can distress be upheld by such a supposition as this? I think not. But even granting that while argument could be made to give some shadowy justification for such a procedure, how, may I ask, are the advocates for the retention of this law to justify this act of wrong goods which never were the property of the tenant? Is the case now stands the tenant creates a security over his neighbour's goods for the assignor's own debt, whether such debt be present or future. Such being the case, there is manifest injustice upon the face of it, and a strong temptation to trespass the moral code on the part of the tenant, who at this stage has been constituted wittingly or unwittingly the creditor of the landlord. The justification to seize the goods of a stranger on the premises has been supported on the ground that were it not so, a door would be open to a variety of frauds upon the landlord and that the stranger would have his remedy against the tenant. But what would be the value of such a remedy when the landlord had, perhaps, not only taken the lion's share, but swept off everything. All creditors are open to frauds, as I shall be glad to be informed why the same remedy would not be sufficient for the owner of land, which ordinary creditors have to be content with. By what plausible line of reasoning can it be just to the parties or good for the public that cattle, sheep, &c., sent out to feed should be liable to be distrained when sent on to the land, the owner not objecting to the person sending the stock being in ignorance of the liabilities of the tenant. The risk which those run who have to provide accommodation for the night for stock

en route from markets or fairs to the premises of the purchaser I have spoken of before, and this risk is another proof of the hardships liable to be entailed by this law.

Is it fair to the public that a landlord should admit to an occupation an unsatisfactory tenant, inasmuch as that Act gives the tenant a fallacious position injurious alike to himself and to those with whom he has trading transactions? Reason and justice both point to the reversal of this law if only on the ground just mentioned—there being far more justice that the landlord who initiates the evil should be the loser of his rent, which is interest, not capital, than that the trader, who has been deceived by the illusory position of the tenant to trust him with goods which do not represent interest but capital.

I have been met, when urging the necessity of the repeal of this law, by this argument in favour of its retention—that distress is a direct benefit to the poor, struggling tenant, inasmuch as the landlord would, at a much earlier period, pull up his struggling tenant, than if the law were not in existence. Now, it does not require much insight to see that there may be a selfish motive in retaining such a tenant to his last gasp, again all probability he is paying such a rent as no other man could be found to do. I am inclined to regard the kindness shown by the landlord in such cases as kindness shown and appreciated by himself, and not to the tenant, who has been allowed to struggle on and on until his last shilling is gone.

Another argument, if such it can be reasonably called, in favour of retaining as we are, is, that provided the law is repealed, the landlord would demand rents in advance, and thus increase the difficulty of the tenant farmer. I cannot help speaking of this as one of the very weakest I have heard of, especially at this time when so many landlords are offering farms on very easy terms, and, in many cases, not being able to find tenants, are carrying on their farms by bailiffs. Assuming that distress was abolished is it at all probable that landlords would demand the payment of rents in advance?—a course so contrary to commercial principles and so opposed to the best interest of the owner cannot be entertained by reasonable men. With no more than equal justice, the labourer could demand payment of wages before the completion of his labour. I entertain opinions different from those who are always clamouring that landlords must reduce their rents. I contend that there is no must in the question. The letting and hiring of a farm is a simple matter of contract between landlord and tenant, the landlord being perfectly at liberty to make the most onerous terms and to stipulate for a most exorbitant rent, but it rests with the tenant to say whether he will jump into the net. There are landlords and landlords as there are tenants and tenants; there are owners of thousands upon thousands of acres, and there are the peasant proprietors; it is not to be supposed that so large a body can be brought to act together. The liberal and appreciative landlords will secure the best tenants, as the best tenants will always find landlords who can appreciate them. Landlords have exceptional advantages in securing themselves against losses by judicious choice of tenants and by equitable covenants, and by keeping themselves informed as to the general conduct of the farm by personal vision rather than through the eyes of agents.

We are often told that farmers do not exercise that personal supervision over the management of their business which their forefathers did; may not the same remark be with equal justice made of the majority of landlords in the present day? It is far too general that the only interest which a landlord takes in his property or his tenant is a direct monetary interest, and prompt payment by his tenant. There is very little of that prospective interest shown now-a-days which is due to his successors; hence arises that apathy which is too often found on the part of the tenant. Upon the repeal of this law would follow an earnest looking into the various causes which bar agricultural prosperity, and upon which the temporary interests of the landlord would then depend more than it does under the existence of the law. Then further, the landlord being guided by his interest, would profit by giving reasonable credit, as all others do, including bankers, who do not invariably demand security or guarantee. What, may be fairly asked, would be the state of trade in this country if no sale or contract were entered into without a security such as is at present enjoyed by the landlord? I scarcely think that it is worth while occupying your time by meeting very fully the suggestion that in lieu of the law of distress, landlords would

demanded payment of rent in advance. That might be attempted by a law, but such proceedings would soon find a level, and the difficulty of letting land would be so increased that land would become a drug, just as a tradesman who refused to give any credit would soon find his business curtailed.

I cannot banish from my mind the belief that with the abolition of distress, rents would be lowered, and that present inconvenience might result to many owners of the soil; but that in the end the land would be worth more there can be no doubt. There is too much looking to present advantage rather than to prospective and permanent value. I am inclined to believe that it would not be very difficult to prove that the rent of land in this country and would that all agriculturists would bear this in mind—is quite 7s. per acre beyond what it would be if this fragment of a feudal and barbaric law were swept away. Well, gentlemen, I do not know that that would be an unmitigated evil.

I feel I am treading on tender ground, and I am not oblivious to the fact that in this, as in all that is worthy of the name of reform, some temporary loss and inconvenience must ensue; but may I not ask fairly why the burdens which now most seriously press, almost to breaking strain, upon the agriculture of Great Britain, should not be shared alike by owner, tenant, and labourer; and here I would counsel reflection as to whether or no the true interest of the landowners is not something far beyond the immediate interest in the form of rental. How much of the present difficulties in which the tenants of this country are placed may not be traced to this pernicious law it may be impossible to state with any degree of accuracy; but were it possible to base a calculation upon given data, the present distress would be conclusively shown to be much greater in consequence than even surmise would warrant.

### VARIOUS NOTES.

The paper read by Mr. T. Swan, of Edinburgh, at the Galaheils Farmers' Club, on "The Practical Utility of Fat Stock Shows" supports in a remarkable manner arguments that have not ceased to be urged on seasonable occasions in these columns for very many years. As a live stock salesman Mr. Swan speaks with telling effect on the uselessness of awarding prizes to over-aged and over-fed animals. He tells us that at our principal fat-stock shows the bulk of the prizes go to animals which have been uselessly and unprofitably fed, and which are as nearly as possible unsaleable, and goes on to say that "To those connected with it, it must have been apparent that for several years past there has been a gradual but sure falling off in the demand for over-fed animals, which has culminated this year. From my own experience, and from letters before me from London, Liverpool, Hull, York, and Newcastle, this class of stock could hardly be turned into money, except at a price scarcely equivalent to that obtainable for second or third quality of ordinary fat stock. Notwithstanding the most favourable weather this Christmas for slaughtering such animals, butchers throughout the country are unanimously averse to purchasing them, from the waste in them and the difficulty they have of putting such into consumption." And to show that he was not by any means singular in the opinions he expressed, letters were read from Messrs. Giblett, of London, Gibbons and Sons, of Liverpool, A. R. Bruce, of Newcastle, and Whittaker, York, and Kemp, of Hull, confirming them entirely. Mr. Swan observes that as educational institutions these shows are not carrying out the principal object for which they are intended—namely, to encourage early maturity and profitable but not excessive feeding. This is a point for which we have many times contended; and we are glad to see that such a practical authority as Mr. Swan is in favour of the very limit with the same exceptions to it which we proposed last week, and which were written without any knowledge of Mr. Swan's views on the subject. The closing remarks of Mr. Swan's paper are expressive of opinions we can thoroughly endorse, and we commend

them to the careful attention of our readers. He said: "What is required is increase in the quantity of our store cattle. The present price of beef, though even now more than an average, bears no comparison to that which the farmer has to pay for his stores. Take the autumn markets of this season, and you do not require to be told how heavily you have been handicapped in the cost to you of the raw material, in the shape of lean stock. I think, therefore, these fat stock shows, by discarding the aged and over-fed classes, and largely increasing the money prizes among the young classes, may encourage breeding and the early production of meat; and our showyards, while offering to the general body of farmers a much greater source of interest and instruction than they do at present, would at the same time be filled with a class of stock capable of realising a price, affording greater chance of payment to the exhibitor, and generally thereby become of some practical utility." In the discussion which followed, Mr. Allen, of Windydoore, thought that gentlemen who were willing to risk their capital in "going on" with animals which had already attained sufficient age and ripeness were entitled to all the premiums they could get. That is to say, that the object of such exhibitions should be defeated, and the money of the Societies wasted to encourage them in a practice which is of no benefit to anybody. We trust the committees of the several Societies and Clubs will consider the matter in reference to the benefit which would be likely to accrue to the country at large, and not in relation to the "enterprise of gentlemen who choose to risk" their money in a useless manner.

The subject of judging at fat-stock shows which was treated last week, will be further exemplified by the following quotation from the report of the fat stock show held at Chicago, which appears in the columns of the American *National Live Stock Journal* now to hand:—"The judging was all done by practical butchers—men who were in the habit of buying steers, cutting them up, and selling the meat over the block. No consultation between them was permitted while examining a ring, and yet in nearly every case the award was unanimous, showing that they were governed by the same standard of excellence; and, in most cases, their decisions met the hearty approval of the spectators. It was evident that they were governed more by form and condition than by size. A smooth, blocky steer, with small head, short neck, light bone, short legs, well-covered shoulders and hips, well-sprung ribs, good hind quarters and loin, with flesh and fat evenly distributed, was invariably preferred to a larger, coarser animal, with great masses of fat laid on in lumps and patches. As one member of the committee expressed it, 'Fat, to be of any value to the beef animal, must be evenly distributed; the meat must be nicely marbled, and when it goes beyond this fat is simply offal. It is worth five cents a pound at most, while the choice meat is worth from 15 to 20 cents.' And this idea seemed to prevail throughout all the awards. It was this which led them to pass by the large, well-developed, and highly-fattened steers shown by Messrs. Vanmeter and Hamilton's, of Kentucky, in awarding the prize on ear-loads, and give the first prize to the evenly-fattened, well-matured, but much lighter three-year-old steers of Mr. Gillett. Indeed, on the first ballot for this prize, the committee divided, without consultation, five for Mr. Gillett's three-year-olds, and four for the ear-load of two-year-olds shown by the same man. And on the ballot for second prize, the two-year-olds obtained seven, and the large steers of Messrs. V. & H. two votes. They claimed that the older lot had been fed too long, and had become gross with an undue proportion of useless or low-priced tallow." This show shows they are beginning to judge fat-

stock shows in America, and falls exactly in line with the opinions we have expressed both with regard to the judges and also to the stock, and also with the paper read by Mr. Swan. Surely, before another season comes round, we may hope for some of the reforms in connection with fat-stock shows which are so much needed.

We have received from Mr. W. Trehewy, of Tregooor, Cornwall, a private catalogue of his herd of Shorthorns, dated Michaelmas, 1878. The foundation of this herd was laid thirty years ago, by the purchase of Ruth by Harold, 8131, at Lord Sherborne's sale in 1848, at Sherborne Park, Gloucestershire. Her dam (Rachel) was bred by Mr. Booth, of Cotham, Nottinghamshire, and was by Cedric, 3311, who brought in the blood of Lord Spencer's celebrated herd through his sire Ivanhoe by Mr. Charles Colling's Cecil, who was by Comet, 155, sold in 1810 for one thousand guineas. The female line traces to a double cross of Mr. Robert Colling's Meteor who was also by Comet, 155, so that the blood of that sire was inherited both through the sire and dam, and in direct descent from the herds of the Brothers Colling, the founders of the Shorthorn breed. Rachel was the dam of the heifer that was awarded first prize of £20, the silver medal to the breeder, and the gold medal at the Smithfield Club Show, 1845. The tribe has since produced several prize winners, and is well known in her Majesty's herd at Windsor, Messrs. Garne's in Gloucestershire, and other noted herds. The sires since used have been the Earl of Carlisle's Frantic, 8088, who brought in the Booth Isabella strain, Mr. Fawkes' Lord Fingal, 11716, bred from the same tribe as the well-known prize bulls, the Friars, Henry 1st, 11571, and Earl Ducie, 12797, were both bred in the herd. Sir Charles Knightley's Vandumper, 23114, introduced the Fawley or Knightley blood; and Sir Roger, 13863, bred by Mr. Ripley, in Yorkshire, was by Heart of Oak by Grand Turk, who was sold for 300 gs. to go to America; Duke of Manchester, 33690, came from Mr. Robert's herd in Buckinghamshire; and Mr. Fawkes' Lord Montgomery, 26686, again brought back the old Fawley blood. He was by that favourite sire Lord Colham. Of late years the bulls have been hired from Mr. John B. Booth, of Killerby, and his M.C., 31898, is at present in service. The catalogue enumerates 69 cows and heifers of the Ruth family, with their pedigrees; and four bulls—one by British Lion, 30609, and three by M.C., 31898. Reference is also given to bulls hired from the Killerby herd.

The ten-year old Warlaby-bred Lull County Member, latterly the property of Mr. B. St. John Ackers, of Prinknash, Gloucestershire, died the other day.

The four-year-old roan Shorthorn bull Bridegroom, bred by Mr. Outhwaite, Baines, and owned by Mr. Cran, Kirkton, Inverness, has been hired by Mr. W. A. Fraser for service next season in the rising herd at Brackla, Nairnshire. He has been used in the Kirkton herd since he was ten months old.

Mr. C. Hills, of Crystal Spring Farm, Delaware, U.S.A., writes to the *Cultivator and Country Gentleman* as follows:—"We find better demand for good Shorthorns than for many years, at moderate, yet fair prices, from farmers for improvement—preparing for supplying the export demand for good beef from this new country. Except for this new market what would be the price now of good beef cattle here?"

From the *Queenslander* we learn that Dr. Jenkins has made a very valuable addition to his herd at Callandoon, in Queensland, in the shape of 96 well-bred Shorthorns from the Nepean Towers herd.

The winner of the sweepstakes prize as the best beast in

the Chicago Fat Stock Show was a three year-old "grade" of or partly-bred Shorthorn steer, exhibited by Mr. Gillett, who does not study fashion in breeding, but buys only such pure-bred Shorthorn bulls, as he considers will produce the most beef on their stock. The best cow or heifer was a Hereford cow exhibited by Mr. T. L. Miller. The *National Live Stock Journal's* report of this show states that "one rather remarkable feature in the show was the absence of what may be called fashionably-bred animals among the Shorthorns. With the exception of the Young Mary steers shown by Vanneter and Hamiltons, there was nothing that would have attracted attention on the score of pedigree. There was, however, no lack of good animals in proportion to the number exhibited; and while the gilt-edged pedigrees were conspicuous only by their absence, the gilt-edged carcasses were there to speak for themselves. The only breed of sheep shown was Cotswolds."

A correspondent of the *Sydney Mail* has sent to that paper for publication a letter received from "a well-known breeder (of Shorthorns) in Yorkshire," wherein colonial breeders are urged to purchase and breed for utility only, and "*independent of fashion*." The italics belong to the letter. We think the advice to be good.

The same journal states that the work of preparing quarantine stations for cattle and sheep which may arrive from the United Kingdom, has engaged the attention of the stock department during the last month. Three stations have been chosen, viz., Shark Island, Clark Island, and the eastern portion of Bradley's Head. Men from the Works Department have been busy on Clark Island during November, constructing a wharf and forming a road from the water-side to the spot where cattle sheds are in course of erection. On the old quarantine ground, Shark Island, there will be 50 sheds; about 25 will be placed on Clark Island, and at "Bradley's" a similar number will be built.

Mr. B. Reynell, of Killynion, informs us that he commenced his Shorthorn herd in 1869, by purchasing at the sales of the late Mr. Barues, of Westland, and Mr. Kearney animals of the Booth Isabella and Lady Sarah tribes. He has joined twice in the hire of King James (28971), Lieutenant-General (31600), and Royal Baron (40167), from the late Mr. T. C. Booth, the latter bull being now in service with Agamemnon (39357), of his own breeding. Bulls bred by him have been successful at the Irish Shows, Prince James (37326), having got first prize for two-year-olds at Galway, and Jupiter (38477) fourth yearling at Dublin in 1877. His experience is that Shorthorns do remarkably well in Ireland, and improve the general stock of the country greatly. He has a flock of about 60 improved Lincoln sheep. The ewes were bought of Mr. Greetham, Stainfield, Co. Lincoln, and rams purchased from Mr. C. Clarke, Scopwick, have been used. They suit his land, and the half-bred Lincolns are very profitable for both wool and mutton. The hogs are sold fat at about 20 weeks old, and clip an average of 10lb. of wool as shearlings.

The *North British Agriculturist*, in commenting on an American account of the importation by Messrs. Anderson and Finlay, of Lake County, Illinois, of five heifers and a bull, Scotch polled cattle, observes that this is not—as stated—the first exportation of polled cattle to America, as the late Mr. Grant, of Kansas, took out some polled bulls from Morayshire six years ago, and crossed them very successfully with the native cow.

Mr. S. Kidner, of Milverton, Somersetshire, writing to a contemporary, takes an optimist view of the progress made by the Devon breed of cattle, and asks, "To what has the Devon attained? and to what has the Shor-

horn?" stating that it leaves room for a great deal of discussion. We should scarcely have thought that it did; for although the Devon breed has attained a high degree of perfection—and Mr. Kidner's ox was the most perfect animal we have ever seen in a fat-stock show—it has not spread, and certainly has not attained to anything approaching the general usefulness of that of the Short-horn.

The death from apoplexy is announced of Mr. John Azeriah Smith, of Bradford Peverill, a well-known breeder and successful exhibitor of Devon cattle.

The *North British Agriculturist* states that the sufferings of the deer in the higher districts of Aberdeen, Banff, and Moray, where the snow is not less than four to five feet, have been very great. For fully six weeks scarcely a pick of heather has been visible, so that the denizens of the forest have suffered immensely. The death-rate has been exceedingly heavy, and the survivors are in extremely poor condition. Indeed many of the famishing animals have forsaken their accustomed haunts, and have been compelled to search for food in the nearest inhabited and cultivated glens. According to the same journal the wet summer and the numerous floods have been the cause of spreading widely the parasitic disease known as rot or liver-fluke in sheep, and that many lands usually sound became tainted; remarking that cases of rot will, probably, also be found among cattle, hares, and rabbits. Liver-fluke is not common among cattle, and not very common among rabbits, but hares form a good "host" for the entozoon. We should be glad to hear that the bulk of the hares and rabbits in the country were fatally coated this season.

It is also stated that Mr. Mitchell's herd of Shorthorns at Aughnagathle, wherein it appears that the bull Duke of Chambergh's last years get was 19 heifers and 7 bulls. It would be fortunate if the coming season should prove more favourable than the last in respect of heifer calves in Shorthorn herds, as of late there appears to have been a preponderance of bulls. Three heifer calves are also reported from the Warley herd, by Royal Halmaby. We are informed that Mr. Mitchell, has purchased the bull Lord Mayor, 38626, from the breeder, the Duke of Northumberland, at a high price. He is to serve Mr. Mitchell's heifers got by Duke of Chambergh.

Prairie fires in Western Nebraska and the northern cattle regions, set by Indians, are reported to have burned over such extended districts as to cause well grounded fears that thousands of cattle will be starved before the new grass comes.

An order was recently received at Chicago for 500 barrels of pork to be shipped by rail from that city to New York, and thence by sea, round Cape Horn, to San Francisco. This route is said to be cheaper than the rail freight of 2 dol. 25c. per 100lbs. from Chicago by rail to the Pacific seaboard.

Mr. Wm. H. Vanderbilt has established a new line of ocean steamships to be called the Unicorn Line, which is to carry to Europe western freight landed at New York by the New York Central Railroad.

The agricultural college in Colorado was finished last week. The building cost 7,282 dol., and is considered to be very cheap. As soon as the college is furnished it will be ready for the reception of students.

At a meeting of the Ontario Agricultural and Arts Association, Mr. Otto Klotz, of Preston, said he had received an intimation from Prince Bismarck that it was thought desirable to obtain the seeds of Canadian forest trees in large quantities in order to plant forests in Germany. Steps will be taken to procure the seeds.

A correspondent of the *Albany Cultivator* thus describes a successful instance of large farming in Dakota:—Over a year since I gave you a description of the great Cass and Cheney wheat farm, located in Cass county, Dakota, on the line of the Northern Pacific railroad. The letter, I notice, was quite extensively copied in many western papers, the magnitude of the enterprise no doubt attracting a great deal of interest. It may be of interest to your readers to know the result of the third year's operations on this great wheat field, especially as this has been one of the "off" seasons with us.

The area of the farm it may be remembered is 10,240 acres; of this 5,654 acres were in crop this year, with 2,550 acres of additional breaking, making now in all 8,204 acres ready for seeding in spring of 1879, a field equal in size to one mile in width and thirteen miles long.

This year's products are—

	Acres.	Product.	Av. per Acre.
Wheat.....	5,103	111,933	21 9-10 bush.
Oats .....	312	16,493	52 4-5 do.
Barley.....	239	8,272	34 3-5 do.

The total product of all grains was 136,698 bushels—the entire wheat crop grading No. 1. The number of men required during the seeding season was 125, and in the harvest season 328. To carry on the operations were required 126 horses, 20 breaking ploughs, 47 stubble ploughs, 17 gang ploughs, 81 harrows, 30 seeders, 45 self-binding harvesters, 67 waggons, and 8 large steam thrashing machines.

Seeding commenced March 25, ended April 20, and leaving out rainy days and Sundays, gave an average of 270 acres each day. Oats and barley were harvested between the 16th and 25th of July, and on the 29th the wheat harvesters commenced and completed the 10th of August. The entire 5,103 acres in wheat were cut in 11 working days.

Thrashing commenced on the 12th of August, and on the 13th the first 5,000 bushels were shipped, followed by daily shipments of from 5,000 to 8,000 bushels, until by the 16th of September the entire crop had reached Duluth, and most of it had been re-shipped for Buffalo.

The manager of this enterprise, Mr. Dalrymple, states that the cost of making the crop was a little less than 8.50 dol. per acre. What it was sold for he does not disclose, but as the market price for wheat at the time of its shipment, was at that station an average of 90 cents a bushel, it is easy to estimate the large profit realised. With such results it is useless to argue against farming on a large scale. Good business management must of course be one of the principle factors that govern, in this case supplemented by having land peculiarly well adapted to wheat culture.

All interested in the development of our new north-west are watching the result of this enterprise with more than ordinary interest, for there is now by this and others of same nature being determined the question as to whether large capital can to advantage be used in wheat farming on an extensive scale, the same as it has been in corn, cattle, sheep and cotton in other localities. The results so far are certainly encouraging, and the success attending has stimulated others in the same direction, both in larger and smaller degrees.

Our Canadian correspondent writes:—The Canadian *Monetary Times* reports 1,000 head of cattle and 3,000 sheep left Toronto, Dec. 20th, for shipment to Liverpool; and that exporters have orders for double the number of choice animals at present obtainable. It adds that there are now 250,000 head of cattle, and 500,000 sheep "stall feeding" for spring shipment, and that the exporting company in Toronto intend to freight one ship per day with cattle and sheep at Montreal and Quebec from the opening of



navigation. The receipts from shipments of cattle and sheep from Toronto are expected to aggregate about 15,000,000 dols. during the first six months of 1879. This, and similar "tall" statements in the Canadian papers must be taken *cum grano*. The 250,000 head of cattle, if Canadian produce, preparing for exportation, is mere moonshine. The *Monetary Times* must mean that native and imported beasts to that number are now being fattened in Canadian distillery byres and elsewhere in Ontario—an unlikely story—or else that they are being fed in stalls, in the States and Canada, pending the opening of navigation. That the trade will be actively pushed this year by the speculative dealers is certain, the profits on successful ventures being very large. The Toronto and other Canadian cattle jobbers buy Western cattle—that is those fed in Illinois, Missouri, etc.—at 30 dols., which they ship from Boston, the animals standing them in 45 dols. per head before they reach that port. The ocean freight is from £4 to £5 per head. The Canadian dealers also ship largely, *via* Montreal, animals which they have imported from the States, and fed during the winter on distillery refuse and hay. Mr. Britton, one of the chief Toronto buyers, in a letter to the *Telegram*, says the dealers, owing to lack of supply at home, have to buy in the Western States, a simple fact refuting the bancombe stories circulated by English newspapers, in order to impress the English farmers with notions of the fertility and great food-producing capabilities of the colony. The *Toronto Mail* puts the case in a nutshell as follows:—"At the present time three-fourths of the cattle shipped by Canadian firms have been bought at Chicago or Buffalo, where the supply is large and the choice varied. This course is forced on the exporters because the necessary number of suitable heeves cannot be obtained here. The ordinary cattle of this country are useless for shipment, and can only be disposed of in some of our home markets. A serious drawback to the rapid and cheap collection of suitable cattle for shipment (in Canada) is the fact that buyers have to travel through so many and distant localities before procuring a few car-loads, whereas they can be obtained any day at the Chicago stock-yards." This is sufficient confirmation of the information you have at times published from Canadian correspondents, *re* the trade here. It points to a limited number of suitable beasts owned by scattered farms, in isolated districts, often very difficult of access, owing to the very bad roads. All paragraphs in English or Canadian journals tending to conclusions opposite to these indisputable facts may be set down as originating with interested persons. As a rule, the native Canadian animals are slow of sale here and elsewhere, as the meat is tough and tasteless. Grade animals, of which the production is very limited, are the only class suitable for export, or which command good prices. The trade and navigation returns for 1877 show out of 5,478 horned cattle exported to England, 1,471, or more than 1 in 3 were not the produce of the colony. I estimate, that from 5,000 to 7,000 suitable beasts is about the length of our tether in home-grown export to Britain. But our jobbers will, doubtless, this year export American cattle with increased energy on account of the large profits.

From the *Illustrated Australasian* we learn that at the Metropolitan Exhibition, at Melbourne, a large number of reapers, binders, and strippers were on view. The stripper is an Adelaide invention for reaping and thrashing in one operation. It is thought that these machines will be more extensively used in the colonies than even binders, as the straw is of little value there except to burn. Reports to November 30, 1878, state that the reports of rust and "take-all" continue to come from the chief wheat producing districts of Victoria, but so far, however, the area affected bears only a small proportion to the total

acreage under this crop, and from the larger portion the reports are more than usually favourable, so that a more than average yield may still be counted upon.

It has been proposed to form a Farming Company in Victoria, to rent 1,000 acres on the Gundary Plains, and cultivate it on scientific principles.

From New South Wales we learn that the weather has been extremely hot. The *Sydney Mail* of November 23rd states that apparently no part of the colony had been favoured with a shower; but notwithstanding this the agricultural reports, with few exceptions, speak of fair pastures and promising crops. In the North haymaking has commenced at Murrumbidgee, and a good crop is being secured. At Denman wheat-harvesting is in progress. Here rust has done some damage, but the crop is on the whole fair. On the Liverpool Plains, where some time back eight inches of rain fell pasture is plentiful, but grasshoppers are doing some damage. The crops around Tamworth are in fair condition. The wheat at Laverell is better than was ever known in that district. In Armidale the weather is favourable for wheat, but rain is wanted by those who wish to plough for maize and potatoes. On the Clarence the early maize crop is partially a failure, and rain is much required on the Richmond. The Western country promises an excellent return. At Wellington there has been a little rust. In Orange the hopes of a good harvest are being strengthened. Haymaking is now general at Mudgee, and the wheat crops are looking well. In Dubbo there will be severe losses through rust, as nearly every farm is more or less affected. Forbes and Parkes are in splendid condition.

The reports from the pastoral districts still furnish cheering accounts of the pasture, the water supply, and the condition of stock. The last-mentioned seem to be specially favoured, for diseases are almost unknown, a few slight cases of pleuro being the most notable exception. Shearing has almost been brought to a close in the Southern country, save in those districts near the coast. In the West it is still proceeding, and in the North it has commenced. The clip, according to all reports, has been excellent. The reduction in the number of sheep through the last drought will, of course, affect the total quantity, but the quality is equal to the best of former years, and the average per sheep far better than was expected. Grasshoppers threaten the pastures in the North and West, but as yet they have not become plagues in any district, or at least do not promise to repeat the devastations which caused such losses four years ago. Unfortunately the uncertain state of the wool market, and the low condition of the fat-stock markets, restrict pastoral transactions. These, however, are the only drawbacks, for with the season no fault can be found.

The Government of New South Wales passed the following Act of Parliament on the 5th November in relation to the *Phylloxera Vastatrix*, or grape-vine louse:—

"1. It shall not be lawful to import into the colony, either by sea or land, any grape-vines, grape-vine-cuttings or grapes, and whosoever shall so import or attempt to import any such vines, vine-cuttings or grapes, shall forfeit and pay for every such offence any sum not exceeding twenty pounds and all such vines, vine-cuttings, or grapes imported or attempted to be imported contrary to the provisions of this section shall be forfeited and may be seized and destroyed by any officer of Customs or police officer: Provided that it shall be lawful for the Governor with the advice of the Executive Council by proclamation in the *Government Gazette* to exempt any place or places from the operation of this Act. 2. Nothing herein contained shall apply to raisins or currants. 3. Whosoever shall wilfully obstruct any officer of Customs, police officer or constable when acting in the execution of this Act shall forfeit and pay for every such



offence any sum not exceeding ten pounds. 4. All information for offences against this Act may be heard and determined and all penalties under this Act may be imposed by any two Justices of the Peace in a summary way. 5. This Act shall continue in force until the first day of January One thousand eight hundred and eighty-one, and may be cited as the "Grape-vines and Grapes Importation Prohibition Act."

In South Australia muggy weather has caused rust to spread, but according to the crop report of the *Adelaide Observer* no serious damage has been done, and cold wet weather, which has been experienced of late, has afforded hopes of a good harvest. "In the old wheat-growing districts, owing to dirty ground and exhaustion," says the *Observer*, "It is not to be expected that the yield will be very heavy, but in the new areas, and in virgin soil, there is promise of very fair crops."

New wheats are reported from Port Augusta to be of good quality and to average from 15 to 20 bushels per acre. The grain report of the *South Australian Chronicle and Mail* states that, "Although some small parcels of new wheat have been placed in the market, the quantity has been so small that the new season can hardly be said to have commenced. For immediate delivery the quotation is 4s. 7d. to 4s. 8d. for farmer's lots; for delivery in December 4s. 6d., and at Port Pirie 4s. 3d. to 4s. 4d.; but buyers are very shy, and as there are no charters for forward loading we should not be surprised to see prices drop considerably when the rush of new grain comes in. We have hardly ever known a season open so quietly. For old wheat 5s. is asked, but there is little enquiry. Flour, town brands, stands at £12, country sorts at £11 5s., with but few transactions. Harvest reports continue very conflicting. In some neighbourhoods the yield is good and the sample a fine one, but in many parts rust has made sad havoc, and the grain is much pinched. We certainly cannot hope for an average of over nine bushels."

From Queensland the reports that the weather has been hot, but that good pasture exists in nearly all districts. The wheat harvest has commenced on the Darling Downs. The Toowoomba correspondent of the *Queenslander* on the 18th instant, writes to that journal:—"With regard to the crops, the more forward are being harvested with various results between good and indifferent. The rust is not confined to this neighbourhood: at Clifton, I hear about half the wheat has been so badly attacked that it has been cut for hay; the lucerne in that locality has also suffered from the ravages of caterpillars; about 80 acres at East Talgai, newly planted and looking well, was wholly devastated almost in a single night, and had to be sown again. Most of the Downs country continues to look splendidly, and the sheep are in excellent condition." The destruction of marsupials is being carried out vigorously in many districts. In the Burnett three men succeeded in destroying not less than 1,200 amongst them, each man having only one gun; this number, at 8d. per scalp, represents over £3 a week, which is a fair wage for those engaged in the work.

The *Sydney Mail* of Nov. 30th, says of the harvest in Australia:—"Taken as a whole the reports from all districts favour the assumption that the harvest of this year will be one of the earliest known in this colony. The season from the time the seeds were sown has been all in favour of the farmer. Large averages are expected, and we do not think that many people will be disappointed when the thrashing-machines have done their work."

This harvest there will be a struggle for supremacy between the stripper and the combined reaper and binder. In a contemporary we find that a practical farmer, who has well tried the stripper, writes in favour of the reaper

and binder, and estimates that in every 100 acres it will have an advantage over the stripper of at least £8. He values the chaff and straw at 20s. per ton, and sets down £5 as the amount which may be saved by early reaping. Thus, although 100 acres harvested by the combined machine will cost in wages, &c., £104 11s., and the same area cut by the stripper only £70 15s., he shows that in the end the farmer will by the former be benefited to the amount mentioned.

The Armadale correspondent of the same journal writes:—"As wheat is the principal cereal grown here, and as we are within a week or two of harvest, a little information about it might not be out of place. I will begin by saying it is many years since we had such a splendid prospect, a heavy yield, and I have no doubt the number of bushels will be greater than has ever been raised here in any previous year. The high prices obtained for the past few years, from 6s. to 9s. per bushel, have induced many farmers who had been spelling their paddocks, to again cultivate them, and also to break up new ground. So that there are probably between seven and eight thousand acres sown, say one-fourth more than last year. I was through a great many of the farms recently, and at Saumarez Ponds, and Kelly's Plains especially, I never saw anything more pleasing to look at than the countless paddocks of wheat adjoining each other, all out in ear, waving quietly in the gentle breeze, reminding one of a vast prairie, as the dividing fences were concealed in, most places. The much dreaded rust has not shown in any part of this district, and as the ears are quite full and the grain nearly matured, it could now do little if any damage, so that we may confidently expect an average return of from twenty to twenty-five bushels per acre. Numbers of paddocks will give forty to forty-five bushels to the acre, but, as a large portion of the land has been under cultivation without a spell, or being manured, or even a change of crops for ten or fifteen years, I think twenty bushels will be a fair average to calculate on. And this will give about one hundred and fifty thousand bushels in the district, or half as much more than we had last season. Other crops require a little rain, as the warm weather and scorching winds we have had have dried the ground up a good deal; but wheat does not want any more, and it is ripening fast. I am certain it will not be worth more than 4s. per bushel, as there will be a large stock of old wheat on hand."

## HOPS.

Mr. J. D. Davis, of the Borough, writes to the *Times*:—

"That the cultivation of hops has been unremunerative during the last two or three years, no one who has any acquaintance with the subject will deny. It is also equally certain that English growers are heavily handicapped by the extra tithe. But would the imposition of a tax on foreign importations be a real remedy for the evil? The alternative plan of repealing the oppressive tithe would, I submit, be more in accordance with common sense.

"There is another remedy which perhaps you will allow me to advert to and this has the advantage of being in the hands of the home growers. They have during the last seven years (1871-8) increased the acreage by upwards of 12,000 acres—i.e., nearly 20 per cent. Let them during the next few years pursue an opposite course, by digging up their inferior sorts, which glut the market at the commencement of the season, and so tend to lower values. The quality of their produce would thus be improved and the supply lessened, with the natural effect of raising prices. It should also be remembered that the foreign grower has been obliged lately to sell his produce at a loss as well as his English rival; and the one can no more afford to do so than the other. These facts should be a consolation to our aggrieved friends in Kent and Sussex."

## MR. J. B. LAWES ON THE SALE OF STRAW.

Mr. J. B. Lawes, F.R.S., writing to the *Agricultural Gazette* says:—

The wheat crop of 1878 was characterised by a great produce of straw, and, in proportion to its straw, an indifferent yield of grain. Over 2½ tons (or nearly 5 loads) of straw were grown on 1 acre of our permanent wheat field. In the London markets wheat straw is quoted at 38s. to 42s. per load. The value of the straw in the experiment referred to would thus be equal to, or perhaps more than, that of the grain. It frequently happens that bulky straw crops are deficient in yield. The sale of the straw would, therefore, afford some compensation.

Eleven years ago, after removing both straw and corn from the land for twenty-four years in succession, we thought it would be desirable to ascertain, by direct experiment, the effect of annually returning to the land the straw which had been removed from it in the previous crop. Accordingly, eleven differently manured plots, each receiving the same manure year after year, were respectively divided into two equal portions, one of which the straw has been annually returned, whilst to the other it has not. The straw was cut into fine chaff, spread upon the land, and ploughed in before the seed was sown. We have therefore, at the present time, the produce of eleven successive crops of wheat grown by very various artificial manures, with the straw always returned, and also an otherwise exactly corresponding series, but with the straw not returned.

Out of the eleven comparative experiments, there are seven in which the produce is the highest where the straw has not been returned, and only four in which it is higher with than without the straw.

In the cases in which the artificial manure contained potash there has been even rather less produce with than without the return of the straw; but where no potash has been applied in the artificial manure there has, on the other hand, been rather more produce with the straw than without it. Even without potash in the manure, the effect of the straw has been but slight, and the increase has been in larger proportion of grain than of straw. Thus, upon the land manured every year with salts of ammonia and superphosphate of lime, without potash, the application of more than a ton of straw chaff annually has given an annual increase per acre of 1½ bush. of grain and only 63 lbs. of straw over the produce by the same manure without the straw. On the land receiving every year salts of potash, soda, and magnesia, and superphosphate of lime, but no ammonia-salts, the produce has averaged over the eleven years only between 13 and 14 bush. of grain per acre; and here the return of the straw has given no increase whatever, although, besides mineral matter, it would supply to the land about 6 lbs. of nitrogen annually; and it might be expected that, in the course of eleven years, some at any rate of this would have been effective. We have on more than one occasion called attention to the very slow action of the nitrogen of farmyard manure, and it is quite possible that the decomposition of the straw has not reached the stage at which much of its nitrogen has become available, though the results seem to indicate that some of its potash has in some way been effective.

In all these comparative experiments the differences in the amounts of produce with and without the straw are so slight, that, from a practical point of view, it may be said that the return of the straw has, up to the present time, had no effect upon the crop. This is so, notwithstanding that twenty-four successive crops of wheat, grain, and straw had previously been taken from the land, and that now thirty-five successive crops have been removed.

From these results we may surely learn that, in the case of certain descriptions of soil at any rate, the removal of the straw, whilst it would be profitable to the tenant, would not be injurious to the owner of the land; and as in practical agriculture wheat-straw would so be removed from the land at most once in four years, on soils similar to that at Rothamsted, the process might, it would seem, be carried on, instead of 35 years, four times as many—or 140 years—without showing injury. At all events, at a time when the question of greater freedom in agriculture is assuming such practical importance, such results should tend to allay the fears of those who think that the sale of straw must necessarily lead to the ruin of the land.

## POTATOES FROM GERMANY.

The official report of the quantity of Potatoes exported from the German Empire in 1878, as compared with 1877, shows the following results:—

	1878.	1877.	
	cwts.	cwts.	
January ...	314,037	175,093	138,945*
February ...	916,078	263,337	650,691*
March .....	1,323,951	291,020	1,032,931*
April .....	1,117,891	316,205	801,686*
May .....	554,319	251,750	299,569*
June .....	136,651	125,870	10,781*
July .....	93,149	24,668	68,881*
August .....	113,925	90,755	23,240*
September...	402,923	276,403	126,519*
October .....	871,000	1,246,483	374,683†
November...	937,070	2,007,610	1,070,540†

\* Increase.

† Decrease.

For the first eleven months of 1878 the total exports were therefore 6,780,863 cwts., as against 5,074,213 cwts. in the same period of 1877. So far, therefore, 1878 shows an increased export of potatoes of 1,706,650 cwts. as compared with 1877. The largest proportion of the potatoes exported from Germany find their way to this country. The improved harvest with us has made itself very plainly visible in the vastly diminished exports from Germany last October and November, the falling-off having been no less than 374,683 cwts. in the former, and 1,070,540 cwts. in the latter month, or 1,445,223 cwts. in the two months together. By far the larger proportion of these exports are shipped to England from Hamburg and Bremen.

**DODDER ON FIRST YEAR'S CLOVER.**—The luxuriant growth of young clovers caused by the rainfall of the past summer will satisfactorily account for the appearance of dodder during the autumn in clovers sown the same year, an instance of which came under our own observation in the south of Hampshire. This parasitical plant does not usually make its appearance until the first crop of clover has been cut, that is to say, on the second growth of the previous year's planting. The reason for this appears to be that the germination of the dodder seed usually takes place in July or August, and at that time, and during the time immediately succeeding harvest, the young clover plants are not strong enough to support the parasite. The dodder, in that case, after fixing itself on the clover stem and relinquishing its hold on the soil from which it sprang, fails to obtain sufficient nourishment from the pieces of the young clover plant—whose epidermis is penetrated by the adventitious roots, or suckers, of the parasite—and consequently dies. The following year such of the dodder seeds as may have lain dormant in the soil germinate, if conditions are favourable, and finding strong host-plants ready at hand, the patches spread rapidly; flowers and seed soon follow, and the mischief is done. It is quite certain that dodder seed will germinate the first year readily enough, inasmuch as the new seed will—if the weather be hot and moist—grow out of its own capsules. Thus it would appear that dodder would as frequently be found in first year's clovers as in those of second year's growth, if the host-plants were then strong enough to support it.—G. T. T. in the *Country*.

**EMIGRATION STATISTICS.**—New York papers publish the following comparative statement showing the number of immigrants who landed at the port of New York, in each month of the last two years. 1877 and 1878:—January, 1,814 and 1,610; February 1,947 and 2,331; March 3,556 and 4,558; April, 7095 and 8,197; May 9,881 and 11,450; June 8,142 and 9,783; July 6,515 and 8,622; August 6,089 and 7,414; September 6,279 and 8,621; October 4,965 and 7,815; November 4,515 and 5,745; December 3,025 and 3,256—total 63,855 and 79,832. There was, therefore, an increase in the number of immigrants in 1878 above the number who landed in 1877.

## REVIEW OF THE CORN TRADE,

FROM *THE MARK LANE EXPRESS* FOR THE WEEK ENDING JANUARY 27.

Frost has fast bound the greater part of North-Western Europe during the past week, and the United Kingdom has had a mid-winter rest, which but seldom has occurred in recent times. When similar periods of winter repose to the land have occurred the farmer has usually found his field and seed go on from spring to harvest-time favourably, and we will hope such a prospect is in store for 1879. Doubtless the continued frost has delayed, if not averted, the flooding of the river sides and low lands receiving the drainage water from the surrounding hills which ten days ago threatened the country, and, although a thaw, whenever it comes, must bring down an excess of water from high levels of the lower lands the evil becomes lessened as the season advances and sun and winds gain in strength to evaporate moisture. The last fortnight has "weathered" the outstanding ricks so as to afford opportunities of thrashing out, and of which advantage has been taken, so that farmers' supplies for the next month should be in fair condition. Of course there has been a run upon all feeding stuffs to satisfy the stock under shelter; but as most farmers have had a large store of forage and roots, whilst imported maize, oats, and feeding barley have been exceedingly cheap, but the spell of winter from which human and animal life has suffered has not been unfavourably to farming prospect. The past week has not been marked by any improvement in the price of English wheat, which remains exceedingly low in all parts of the country, and at the smaller local markets no less than on the large Exchanges, where farmers deliveries have to compete with the grain imported from America, Russia, India, and elsewhere. The averages of the different markets range between 30s. and 48s. the imperial average standing at about 39s. only, a price which has frequently been paralleled within the last century after good harvests, but which has, we fancy, been never before quoted after a mediocre crop, and in the depth of a winter of no ordinary rigour and severity. The condition of market deliveries has improved a little, and the bulk of offerings are still uninviting. The imports of wheat during the last ten days have been considerable; the Californian fleet is beginning to arrive and will, from the present time, continue for some weeks the principal item in the ports' lists of imported grain. The demand for wheat has not been proportionate to the supply, and sales have been difficult to effect at nearly every market. This slackness of inquiry proves very disappointing to grain holders who relied on an increased demand with the new year. The depth and the extent of the existing industrial depression in this country is a moot point, but if the corn trade of the past two months teaches us nothing else it would at all events appear to indicate that the stagnation of general business and the increased poverty in the nation have been and are deep

enough to touch the sale of bread. The proportion of bread to other articles of food in the wants of the poor is of course very considerable, but the poorer classes have of recent years become consumers of so much more meat, pork, cheese, &c., that depression of a passing or trivial character would probably no more than suffice to diminish the sale of those simple luxuries. In the present day it must be a very serious depression of industry which makes itself felt in a noticeably diminished consumption of the one necessary food and staff of life. We need scarcely remark that in ordinary times the present scarcity except of vegetables, potatoes, could hardly fail to cause an increased demand for the quartern loaf. Frost has now continued, with two slight breaks, for many weeks, and yet demand appears to be as backward as it was at the end of November. This it is which surprises importers and disappoints the markets. Apart from the diminished consumption of bread it is, however, clear that millers show very great disinclination to burden themselves with stocks of wheat. The imports of wheat into the United Kingdom for the week ending the 18th inst. were 261,715 qrs. of 504lb., being a quantity about 35,000 qrs. in excess of the average weekly arrivals of foreign grain during 1878. The quantity was considerably in excess of arrivals in the two preceding weeks of the present year. The imports of Barley were 39,592 qrs. of 416 lb., a quantity a good deal under the average and smaller than the very moderate arrivals of the week ending January the 4th and 11th respectively. The imports of Oats were 95,011 qrs. of 320 lb., and were up to a full average. They were larger than the arrivals of either of the two preceding weeks. Of maize the importation amounted to 147,721 qrs. of 480lb., a fairly good but by no means excessive bulk of corn. The arrivals of the last two months have been on a moderate scale, but, owing to the cheapness of oats and the good home crops of hay and roots, demand appears to have been unequal to offering, which have accordingly gone to make up a rather formidable stock in granary. The imports of beans were 1,107 qrs., of peas 5,006 qrs. only. The London market of Monday was of a disappointing character, the frosty weather failing to move the average market attendance to purchasing of any staples. The severe cold and the atmospheric signs of a continued frost made holders of wheat a little more firm than they had been at the previous market; but this had simply the effect of restricting sales within the narrowest limits for all but special samples of English and Californian wheat, for which inquiry at full prices was fair. American spring wheat was a little improved in favour with miller but all other sorts of wheat were extremely dull of sale; English wheat deliveries amounted to 4,067 qrs., and as compared with the previous week, there was an improvement both as regards

quantity and condition. Of foreign wheat the imports amounted to 49,733 qrs., of which quantity about one-half was from America. The remainder was made up of Indian, Australian, Russian, and German wheat. The total bulk might be considered a fairly good supply. Exports, 2,619 qrs., showed an increase on the two previous week's but there is not much doing in the way of Continental demand. America and Russia are supplying, directly to France, an immense bulk of grain, and there seems to be no room for "peddling" business between the two great import powers of the present season. The supply of barley was thus made up: English, 1,466 qrs.; Scotch, 5,923 qrs.; Irish, 150 qrs.; foreign, 2,925 qrs. The total was small owing to the very poor arrivals from abroad; but it would have been still smaller had not the arrivals from Scotland been unusually good. The inquiry was moderate only, but the small supply from abroad made Danubian feeding barley a slightly improved shade, while the Scotch grain met with some favour. Oats were again in heavy supply from Russia and Sweden, the total quantity arriving being 71,763 qrs., of which all but 754 qrs. came from abroad. The effect of these imports was a depression of prices 3d. to 6d. below the currencies of the previous market. Sales were sometimes pressed, but this was not generally the case. Maize, 3,614 qrs., was firmly held, consequent on the scantiness of the week's supply. The extreme depression in the oat trade made demand for Indian corn very weak. Sales were very difficult to effect. Imports of beans and peas were small and prices were without change. On Wednesday, frost continuing, and the river being partially blocked by ice, holders expected to find some improvement in demand, but were disappointed in their hopes. Wheat hung on hand at Monday's prices, and trade, if changed at all in tone, was changed for the worst. Barley was steady in price, but oats tended to further decline from Monday's reduced quotations. Maize, beans, and peas were without alteration. Friday's trade was again of a disappointing character, as the continued frost failed to stimulate demand. English and foreign wheat were readily obtainable at Monday's terms, but the quantities changing hands were unimportant; several factors complained of an entire absence of business. The English samples were in a fair condition. Barley sold quietly at full terms for malting, and other sorts supported late rates. Oats were now and then in slightly improved terms, and kept value firmly at their lately reduced level.

The following are the reports from Mark Lane during the month:—

#### Monday Jan. 6.

The arrivals during the past week have been:—Wheat, English, 3,858 qrs.; foreign, 88,240 qrs. Exports, 1,867 qrs. There was again a small supply of English Wheat at market this morning, the condition and quality of the offerings being alike unsatisfactory. Prices were nominally unaltered, but the amount of business done was exceedingly limited. Of foreign the supplies were moderate, and a quiet retail demand was experienced at previous currencies, but sales were difficult to effect owing to the fog.

Country Flour, 18,115 sacks; foreign, 15,346 sacks and 30,148 barrels. No improvement could be noted in the trade, which ruled very dull for both sacks and barrels at barely late rates.

Barley: English, 1,408 qrs.; Scotch, 3,454 qrs.; foreign, 1,067 qrs. Malting varieties were in rather better request, owing to the colder weather, and grinding sorts, although slow were not quotably cheaper.

Malt: English, 16,839 qrs.; Scotch, 1,300 qrs.; Irish, 180 qrs. Exports, 1,862 qrs. No fresh feature was apparent in the trade, sales progressing slowly at about last week's prices.

Maize, 20,388 qrs. Exports, 2,708 qrs. An occasional reduction of 8d. per qr. was accepted to effect sales, but as a rule, holders declined making any further concessions.

Oats: English, 325 qrs.; foreign, 21,488 qrs. Exports, 298 qrs. Business was somewhat restricted, but with lighter arrivals from abroad, sales were practicable at last week's prices.

Beans: English, 1,387 qrs.; foreign, 721 qrs. In limited request, but without change in value.

Linseed, 18,120 qrs. Unaltered.

#### Monday Jan. 13.

The arrivals during the week have been: English Wheat 2,809 qrs., foreign 35,066 qrs.; exports 216 qrs. There was again a small supply of English Wheat at market this morning, and most of the samples were in defective condition. Last Monday's prices were obtainable for the few dry lots on offer, but inferior parcels were dull and irregular in value. Of foreign the arrivals were moderate, and with a good attendance of millers, a consumptive demand was experienced at fully late rates.

Country Flour, 17,089 sacks; foreign, 9,190 sacks, and 9,278 bbls. The trade ruled very quiet, and sacks and barrels sold slowly at unaltered quotations.

English Barley, 3,059 qrs.; Scotch, 4,607 qrs.; foreign, 4,622 qrs. There was not much business done, but where sales were made last week's prices were repeated for both malting and grinding descriptions.

Malt: English, 19,347 qrs.; Scotch, 1,485 qrs. Export, 1,506 qrs. In some instances sellers showed more inclination to accept lower rates, but there was very little animation in the trade.

Maize, 18,078 qrs. Exports, 558 qrs. All sound corn in store sold more readily in fully late rates, while to arrive, prices were also the turn in sellers' favour.

Oats, English, 560 qrs.; foreign, 53,361 qrs. Exports, 17 qrs. The trade has to some extent recovered from its previous depression, and with moderate imports, an all round advance of 6d. per qr. on the week has taken place.

Beans, English, 451 qrs.; foreign, 57 qrs. A quiet but steady business was done at former prices.

Linseed, 5,405 qrs. Exports, 1,408 qrs. Dull, but without quotable alteration.

#### Monday Jan. 20.

The arrivals during the past week have been: Wheat, English, 4,057 qrs.; foreign, 49,733 qrs. Exports, 2,619 qrs. There was again a small supply of English Wheat at market, but some improvement was apparent in the condition of the offerings. Dry lots maintained late rates, but inferior parcels were quite neglected. The arrivals of foreign were fair, and with a good attendance of millers a quiet retail demand was experienced at about last Monday's currencies.

Country Flour, 17,543 sacks; foreign, 14,121 sacks and 14,760 barrels. A slow sale for both sacks and barrels at last week's prices.

English Barley, 1,466 qrs.; Scotch, 5,923 qrs.; Irish,

150 qrs; foreign, 2,925 qrs. There was a moderate inquiry for malting and grinding qualities, and quotations underwent no alteration.

Malt : English, 20,798 qrs. ; Scotch, 1,588 qrs. Exports, 1,273 qrs. A dull trade, at about late rates.

Maize, 3,814 qrs. The demand was not very brisk, but both round and flat corn maintained previous values.

English Oats, 714 qrs.; Scotch, 40 qrs.; foreign, 71,009 qrs. Fine old Corn was unaltered, but all new descriptions met a dragging trade, at a decline of 8d. per qr. on the week.

English Beans, 816 qrs.; foreign, 67 qrs.; in fair request, and fully as dear.

Linseed, 35,698 qrs. Exports, 537 qrs. Unaltered.

**Monday Jan. 27.**

There were continued signs of thaw to-day, and the market felt its influence, expecting the river soon to be free again for navigation of barges, &c.

The supply of English Wheat last week was good, 6,516 qrs. : the fresh supply this morning was but small, condition fair. There was but a poor demand at last week's rates. Foreign Wheat, 28,507 qrs., was held firmly or sold slowly at last Monday's trifling reductions.

Flour, 16,243 sacks of English, 4,490 sacks and 3,812 barrels of foreign, was hard to sell at lowest quotations.

Barley: Supply, 2,152 qrs. of English, 2,710 of Scotch, and 8,881 qrs. foreign, was steady in value and demand.

Oats, 681 qrs. English, 77,900 foreign, were depressed in price and slow to sell.

Malt, 18,293 qrs. English, 1,100 Scotch was unaltered in price.

Maize, 17,976 qrs. was steady at old prices, 23s. 6d. to 25s.

Beans, 1 206 English, 862 qrs. foreign were in good retail request.

Peas, 542 qrs. English, 639 qrs. foreign kept at full rates, but were not dearer.

Other articles were in moderate supply, and were sold only at former rates.

The transactions of the market were small in the aggregate, and the tone of business was dull.

**CURRENT PRICES OF BRITISH GRAIN AND FLOUR  
IN MARK LANE.**

IN MARKET PRICES.		Shillings per	Quarter
WHEAT, Essex & Kent, white.....	old — to —	new	38 to 42
	red — old —	new	38 44
Norfolk, Lincoln, and York, red old —	new	36	44
BARLEY .....	Chevalier new.....	36	56
Grinding .....	33 to 40..... Distilling .....	33	36
MALT, pale.....	new 55 to 84..... old brown.....	53	56
RYE .....		30	44
OATS, English, feed 21 to 26 .....	Potato.....	—	—
Scotch, feed.....	Potato.....	—	—
Irish, feed, white 25 .....	Fine.....	—	—
Ditto, black.....	26 .....	Potato.....	—
BEANS, Masagan .....	33 36 .....	Ticks.....	45 36
Harrow .....	— .....	Pigeon, old	40 46
PEAS, white boilers 36 .....	40 Maple 37 to 39.....	Grey 44	36
FLOUR, per sack of 280lb.,	town households.....	36	40
Best country households.....	32	36	36
Norfolk and Suffolk .....	32	30	36

### FOREIGN GRAIN.

		shillings per Quarter.	
WHEAT, Danish, mixed .....	45 to 50 .....	extra .....	to 5 1
Königsberg .....	48 50 .....	extra .....	—
Rostock .....	48 50 .....	old .....	—
Pomern., Meckberg., and Uckermark .....	red .....	44 48	—
Ghirka 37 to 40 .....	Russian, hard, 43 to 46 .....	Saxonska 41	44
Danish and Holstein, red .....	red American .....	38 48	—
Chilian, white 46 .....	California 46 47 .....	Australian 48	50
East Indian, No. 1 Club white, 44 to 45; No. 2 .....	43 43	—	—
Ord. white 40 to 41; red 30 to 38; hard 37 .....	—	—	39
BARLEY, grinding 30 to 32 .....	distilling .....	28 85	—
OATS, Dutch, brewing and Poland 20 to 23 .....	feed 19	21	—
Danish and Swedish, feed 17 to 20 .....	Stralsund ..	21	23
Canals 00 to 00 .....	Riga 15 to 16 .....	Petersburg ..	16 30

BEANS, Friesland and Holstein.....	—	—
Italian.....	34 to 37	37
PEAS, feeding and maple.....	33	36
fine boilers.....	34	36
MAIZE, Black Sea.....	24	24
Mixed American.....	24	24
FLOUR, per sack, French 32.....	34	34
Spanish, p. sack 31.....	34	34
Hungarian, per sack.....	41	41
American barrel.....	19	23
TARBS, Spring.....	—	30

## BRITISH SEEDS.

Mustard, per bush, brown 45a. to 13a., white...	9s. to 11a.
Cantary, per qr.....new 45a. to 47a. ....fine...	49s. 60a
Clovers-ed, fine red and dark purple 90a., com...	60a. 64a
Coriander, per cwt. ....	22a. 24a
Tares, winter, new, per bushel.....	4s. 0d. 5a. 0d.
Trefoil, fine new.....	31a. 29a
Ryegrass, per qr., old and new.....	22a. 24a
Linseed, per qr. ....sowing 60s. to 68a., crushing	53s. 55s
Linseed (cakes, per ton.....	29 10s. to £10 0s
Rapeseed, per qr. ....new.....	60s. 66s
Bape Cake, per ton.....	25 to £5 10s

**FOREIGN SEEDS.**

Coriander, per wt.....	22s. to 23s.
Cloverseed, red 50s. to 64s. ....	78s. 90s.
Hempseed, small 32s. to 34s. per qr. ....	Dutch 36s. 38s.
Trafil .....	29s. 32s.
Rye-grass, per new Italian Bale of 2 cwt. ....	33s. 31s.
Linseed, per qr.....	Baltic 51s. to 53s. Bombay 50s. 51s.
Linseed Cakes, per ton .....	£9 10s. to £9 15s.
Rape Cake, per ton .....	£5 to £5 10s.
Rapeseed, Calcutta .....	62s. 64s.
Carraway .....	31s. 35s.

**CORN IMPORTED AND EXPORTED**  
**FOR THE WEEK ENDING JAN. 18.**

	Imported into			Exported	
	Engl'd.	Scotl'd.	Irela'd.	British.	Foreign.
	Owts.	Owts.	Owts.	Owts.	Owts.
Wheat.....	938950	100113	138455	14009	9352
Barley.....	138845	10010	400	187	6280
Oats.....	270554	907	...	99	...
Rye.....	11200	...	...	...	...
Peas.....	14692	734	...	200	3
Beans.....	2612	2391	...	11	472
Indian Corn.....	370005	4128	240658	...	3024
Buckwheat.....	1519	...	...	...	...
<b>Total.....</b>	<b>1755207</b>	<b>126383</b>	<b>389013</b>	<b>14506</b>	<b>19131</b>
Wheat Flour...	136124	62068	2420	880	1040
Oat Meal.....	9029	3489	...	394	...
Rye Meal.....	...	3	...	...	140
Indian Cornmeal	25	...	...	...	...
<b>Total.....</b>	<b>145178</b>	<b>65560</b>	<b>2420</b>	<b>1274</b>	<b>1190</b>
<b>Grand Total.</b>	<b>1900385</b>	<b>210963</b>	<b>391433</b>	<b>15780</b>	<b>20320</b>
<b>Malt.....qrs</b>	<b>100</b>	<b>63</b>	<b>...</b>	<b>2015</b>	<b>...</b>

**Cobent Garden Market.**

## VEGETABLES

Artichokes, per bus.	0	0	0	Korra Radish, y bundle	4	0	0
Egg, Globe, doz.	2	0	4	Lettuce, per doz.	1	0	0
-Jerusalem, per bbl.	4	0	0	Oss Egg score	1	0	0
Aparagus, sp, bun.	1	6	0	Mint, grn., per bunch	1	6	0
Egg, per lb.	0	0	0	Onions, y bushel	0	0	0
Beans, Fr., y 100	2	0	0	Young, y bundle	4	0	8
-runner, per bus.	0	0	0	Parsley, per bunch	0	4	0
Cauliflower, per doz	1	0	0	-green, per qt.	12	0	0
Corn, per dozen	1	0	0	Potatoes, Rus., Fatball,			
Broom-La Sprouts, hb. 10	0	0	0	per lb.	1	0	0
Cabbages, per dozen	1	0	0	Jersey, per lb.	0	0	0
Carrots, y bunch	0	0	0	Radishes, per bunch	0	1	0
New Fr., per bun.	0	0	0	Spanish per doz.	1	8	0
Cauliflowar, per doz	2	0	0	New Jersey, per doz	10	0	0
Cheerful W. 100	0	0	0	Rhubarb, y bundle	10	0	0
Onions, per lb.	2	0	0	Salsify, y bundle	10	0	0
Green, per doz.	0	0	0	tenkale, per punnet	2	6	0
Okumbers, each	1	0	0	shalots, y lb.	4	0	0
Outard Mar., doz.	0	0	0	s pinch per bushel	4	0	8
Endive, per doz.	1	6	0	sweet Potatoes, per lb.	0	4	0
Peas, per doz.	0	0	0	Tomato, per dozen	2	6	0
Garlic, per lb.	0	0	0	turnips, bun.	0	6	0
Herbs, per bunch	0	0	0	New, per bun.	0	0	0

The Potato market is quiet, and without alteration in prices:—Regents, 100s. to 130s.; Early Rose, 110s. to 120s. per ton.

Printed by HAZELL, WATSON, & VINEY, 265, Strand, London.





*Duke of Saddington 2<sup>nd</sup>*

*A. North's prize Bull the joint property of John Allan, Fiddle Ferry, and the Duke of Devonshire.*

*London Published by R. Rogers & Harding, 288, Strand, W.C.*

# THE FARMER'S MAGAZINE.

MARCH, 1879.

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## PLATE.

### DUKE OF SIDDINGTON 2ND.

A SHORTHORN BULL, THE JOINT PROPERTY OF JOHN ALLAN ROLLS, ESQ., AND THE  
REV. W. HOLT BEEVER.

' Duke of Siddington 2nd (33732), roan, calved April 24, 1874, bred by E. Bowley, Esq., Siddington House; got by Third Duke of Clarence (23727), dam Siddington 2nd by Fourth Duke of Oxford (11387), g.d. Kirklevington 7th by Earl of Derby (1077), g.g.d. Kirklevington 4th by Earl of Liverpool (9061), — Kirklevington 1st by Duke of Northumberland (1940), — Belvedere (1706), — by Son of Second Hubback (2683), — a cow of Mr. Bates's, descended from the stock of Mr. Maynard, of Eryholme.

Duke of Siddington 2nd, when a splendid calf, and a remarkable likeness to the celebrated Exquisite (8048), was bought by Lord Fitzhardinge for 400 guineas at Mr. Bowly's sale in 1875. From Berkely, where he did good service, he came into the possession of the present owners, and now is doing active service at the Hendre Monmouth, and Pencraig Court, Ross. His calves are very good, stylish, broad, and mellow.

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## AGRICULTURE AND PROTECTION.

In these days when many are hankering after Protection, under one or the other of its new-fangled synonyms, it would be well if Professor Fawcett's recently-published book, "Free Trade and Protection," could be generally read, not only in this country, but in the United States, in our Colonies, and throughout the Continent of Europe. Clear, simple, and conclusive, that admirable work must convince its readers of the great advantage of Free Trade if force of argument has any effect on them. As far as manufacturers and consumers generally are concerned, the evidence brought forward by the author to show the fallacy of Protectionist theories is positively overwhelming; but with this, the main portion of the work, we are not immediately concerned in these columns. It is to the chapters which deal with Protection in its relation to agriculture that we desire to call special attention; for although, fortunately, the farmers of this country have not in any very great

number reverted to their old faith in Protection as the sovereign remedy against the ills which they suffer, we have had evidence brought before us recently to show that some of them are disposed to raise the cry that has for a long time been hushed. We are glad to see that Mr. O. S. Read has spoken out plainly upon this question. He sees plainly enough that whether Protection would benefit the farmers or not, they, at least, are certain not to obtain it, and that, therefore, it would be simply waste of time and energy on their part to join in the modern crusade against Free Trade. By their assistance it is barely possible that manufacturers might obtain an imposition of duties upon foreign manufactured goods; but it is certain that no Government would dare to impose taxes upon the bread, meat, cheese, and butter which form the staple of the nation's food. Here we might leave the question, perhaps, without disadvantage, as it is idle to argue about the advantage or disadvantage

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of what is utterly impracticable. Professor Fawcett, however, would not have rendered his book complete if he had not dealt with this branch of his subject, and as what he has to say upon it is interesting and persuasive, it may be useful to refer to it briefly, if only with the object of consoling those who pine for Protection for the loss of what they will never obtain.

At first sight it seems probable that if Protection would be advantageous to anyone, it would be so to the producers of food or any other raw material; and, indeed, it must be admitted that if English farmers owned the land which they cultivate they would be benefited at the expense of their fellow-countrymen by the taxing of foreign food. But a very small proportion of English farmers are the owners of their holdings, and for the rest Professor Fawcett's book shows there would in all probability be no advantage to be derived from Protection. He reminds us of a fact which history tells us, namely, that when the Corn Laws were in force in England, although corn was very high in price, tenant-farmers were in a greatly depressed condition. Not only did the high price of corn attract large numbers of people to farming, so that rents were raised enormously, but the price of labour also rose, so that farmers had to pay doubly for the advantage of selling corn at a high price. So great was the depression, Mr. Fawcett remarks, that "Committees were again and again appointed by Parliament to inquire into the causes of agricultural distress, and it was then proved that as prices rose rents were advanced." He adds:—"Not only did this increase of rent absorb all the advantage which farmers might have derived from the high prices which were created through Protection, but a most serious injury was inflicted upon them by the very legislation which was presumably passed in their interest. The effect of the Corn Laws in raising prices was over-estimated; rents were calculated on a basis of high prices, which in the average of years were not maintained; and farmers consequently were unable to pay the rents which had been agreed upon. The only class, therefore," he concludes "who can permanently profit from any particular produce being made artificially dear are those who own the land on which the produce is grown, and not those who either rent it, or those who use the produce as the raw material of some manufacture." Nor were the farm labourers benefited by the increased wages which farmers were obliged to pay them, with or without the aid of parish rates. Provisions were so high in price that the men and their families could with difficulty get food enough for their

support, and instead of being better off with high wages and dear food, they were in a worse condition than they have ever been before or since the period under consideration. To quote our author again:—"When the sliding scale was introduced, the farmers were once more told that they had been secured a high price for their corn, and that they would always reckon on obtaining 6s. a quarter for their wheat. During the 30 years between 1815 and 1845, when the Corn Laws and the sliding scale were in operation, agriculture, instead of enjoying this promised prosperity, was in a state of exceptional depression." In 1843, it seems, many of the farmers had learned that the result of Protection was not in their favour; for at a meeting held in that year at Colchester in support of the repeal of the Corn Laws, a resolution in favour of Free Trade was passed by a large majority. Professor Fawcett says of that occasion:—"The greatest importance was at the time attributed to this meeting. All the agricultural associations of Essex had combined to secure a triumph for the Protectionist party. The entire county had been canvassed by the leading landowners and by the rural clergy. On the day of meeting the farmers assembled in such great numbers that it was supposed, even by the advocates of Free Trade, that a resolution in favour of Protection would be carried by a large majority. As the proceedings went on the opinion of the meeting seems to have been so completely changed, that a resolution was ultimately passed in favour of Free Trade by a majority of two to one. This result was chiefly brought about by a speech from Mr. Cobden, who in various ways appealed to the farmers honestly to confess whether they had been made more prosperous by Protection. He quoted with great effect the evidence which had been given by several Essex farmers before one of the numerous Parliamentary Committees which had inquired into the causes of agricultural distress. They all agreed in the opinion that rents had been so high since the Corn Laws and the sliding scale had been in operation that the farmers as a body had been unable to pay their way, and that they had been steadily diminishing their capital and adding to their arrears of rent."

Mr. Fawcett admits that the operation of the old Poor Law had a great deal to do with the distressed condition of the farmers at the period just referred to; but it is clear that the excessive competition for farms caused by the artificial raising of the price of corn might, apart from other causes, have led to ruin. If, in considering the probable result of a return to Protection at the present

time, we look at the various circumstances which have to be taken into consideration, we see that there are even more reasons for expecting the whole of the gain to go to the owners of land than there were formerly. Farming as a pursuit is more attractive than it ever was before, and there are more people with spare capital ready to embark in it for pleasure than existed in 1843. Consequently, any prospect of high prices for agricultural produce would attract immense numbers of competitors for farms, and rents would go up to an extent never before experienced.

One result of Protection which we do not remember to have seen noticed is that it encourages a spirit of gambling which is inimical to honest and meritorious enterprise, and calculated to lead to disaster. This is especially the case when the commodity protected is one the price of which depends upon the vicissitudes of the seasons, so that there are certain to be very great variations in value. The hope of very high prices has a similar effect to the offer of a great premium in a lottery, leading people to risk more than a strict regard to the chance of success would warrant them in risking. If wheat were protected so that in any year it might go up to 80s. a quarter, men totally ignorant of farming would disregard their disadvantages in entering into the business, because even a small crop sold at such a price would yield a good return. In the same way the gambling spirit would lead them to ignore the other disadvantage of a rent higher than the reasonable probabilities of success would warrant them in paying. Thus the competition for farms would be artificially increased, and rent would be based on a fictitious value. The effect would be, not to stimulate good farming, but to induce farmers to trust rather to their chance of "luck" than to the legitimate rewards of meritorious cultivation. The whole nation would consequently suffer, the business of the farmers would be more hazardous than ever, and the owners of land alone would be benefited. Wheat would be grown on land unsuitable to its profitable cultivation, and a high rent would be paid for such land, with inevitable disappointment as the result.

On the other hand, the result of a steady determination to make the most of land under a system of natural competition has none of the disadvantages incidental to such an artificial system as has just been described. When success can only be obtained by means of skill and intelligently directed enterprise, rents are not artificially forced up, land finds its natural value, and the fair reward of honest industry is not taken from those who

have merited it by the excessive competition which is engendered by the gambling propensity. It is true that under the existing conditions of land-tenure farmers often cannot retain the advantages which they have justly earned by skill and enterprise; but this question is one quite apart from that of Free Trade and Protection, and the true remedy for the evil is to remove the injustice, not to try to balance it by a recourse to a system which would act injuriously upon consumers, and fail to have the desired effect all the same. As Professor Fawcett has well remarked: "The only way in which the general rate of wages and profits prevailing in a country can be advanced is to increase the productiveness of capital and labour." In this little prescription we have the true remedy for depression in agriculture and commerce alike pointed out; but, as far as agriculture is concerned, we shall not be able to take full advantage of the remedy until the impediments which stand in the way of its general adoption have been removed.

#### THE COMING EXHIBITION.

It is late in the day to raise objections to the scheme of exhibiting foreign live stock at Kilburn next summer, sanctioned by the Royal Agricultural Society. As a matter of fact we had not fully realised all the risk that the scheme involves until the prize sheet of the Society was before us. Now two conclusions force themselves irresistibly upon us—one, that there will be a serious danger in holding the exhibition, and a second, that to consent to it is a great piece of inconsistency on the part of those who have advocated the total exclusion of foreign live animals from our ports, except in very exceptional cases, such as the importation of a valuable breeding animal under specially stringent conditions. The Royal Agricultural Society, not very long ago, petitioned Parliament in favour of the slaughter of all imported cattle and sheep at the ports of embarkation; yet the Society has now sanctioned a plan which will bring a number of these animals into close contiguity to some of the most valuable of our home-bred live stock. No doubt the most careful precautions will be taken in the form of a long quarantine; but we question whether any foreign exhibitor will send animals if the period should be long enough to cover the extreme time during which Pleuropneumonia may be incubatory. Yet if a shorter term be all that is insisted on, there will be an obvious danger.

Everyone who saw the interesting exhibition of

foreign cattle and sheep at Paris last summer must desire to see something like it in London, if it can be held with safety to our live stock. But can it be? Are not the conditions of safety and those of obtaining a good selection of foreign animals incompatible? Again, will the foreign show diminish to a serious extent the entries of home-bred stock, and so do more to injure than improve the exhibition? We all know that the Duke of Richmond's opinion was, in the first instance, against the foreign show: but we have yet to learn the views of exhibitors generally upon the question. On one point there should be no hesitation whatever, and that is in prohibiting the exhibition of sheep from Germany, where Rinderpest prevails.

We do not suppose that the Royal Agricultural Society can now cancel the offer made to foreign breeders, or that the Privy Council can, without special reasons, prohibit the admission of stock from all countries. But this, at least, can and should be done—the extreme period of quarantine, and its probable cost to foreign exhibitors, should be at once made known to them. If the period decided upon be long enough to secure safety, as it undoubtedly should be, we apprehend that the cost and inconvenience will be so great as to be pretty well equivalent to total prohibition. If it will be so, the sooner this is known and accepted as inevitable the better for all parties concerned.

### FRIENDLY SOCIETIES.

The Report of the Chief Registrar of Friendly Societies has recently been issued for the year ending December 31st, 1877. We regret to find that the number of Societies making default remains very large—25,234 forms of returns were sent out, and 12,338 were received, being less than half. The increase on the corrected figures of the previous year was, however, considerable, amounting to 1,058 returns. The number of members returned rose to 4,364,772, being an increase of 960,585; and the funds returned were £10,226,883, an increase of £889,934. When it is considered that for 1874 the returned membership was only 2,075,893, or less than half that returned for 1876, it will be seen that a decided step has been taken towards statistical accuracy. About 5,000 returns had to be sent back for amendment. In some cases the returns had not been examined by auditors, or the amounts were not balanced; in others expenses had been incurred not authorised by the rules; whilst many Societies had not provided a separate management fund as directed by the rules. In a few cases the Chief Registrar regrets to say that very unsatisfactory

returns were received, bearing the names of public auditors. In one instance where, in violation of its rules and of the law, a Society had kept no separate management fund, the public auditor certified the annual return as being in accordance with law, on the mere statement by the officers of the Society that the rules had been altered.

Twenty-seven collecting Societies (those receiving contributions by means of collectors at a greater distance than ten miles) made returns, of which fourteen belong to Lancashire, five to Middlesex, two to Stafford, and one each to Cheshire, Surrey, Sussex, Warwick, Worcester, and York. These twenty-seven Societies in all had no less than 1,725,584 members, 1,499,438 of whom were returned by the Lancashire Societies alone, but only £799,731 in funds, of which £442,485 were returned by one Society of 682,371 members, leaving £357,246 for the other twenty-six Societies with 1,043,213 members. The costly nature of the operations of these Societies is shown by the circumstance that whilst the total receipts for the year were £620,091, of which £585,280 were from contributions, the total management expenses, as returned, were £245,533, of which £239,247 was out of contributions, as against £283,694 spent in benefits. In some instances the amount returned as expended in management exceeds the benefit payments. It must be very discouraging to those seeking to exercise providence to find themselves so victimised by so-called management expenses.

The writer of an essay, which we see has been awarded Mr. Forster's second prize, proposes a general Society, with a subscription of one penny per day, making 30s. 5d. per annum. The five-pence he estimates to cover management expenses, and the thirty shillings to secure a sick relief of ten shillings per week in sickness, and to leave one pound per annum to be carried to the member's account, to be paid him, with compound interest, in old age, or to his representatives at his decease. This plan has the advantage of the Society never having to pay more than it has received, its liabilities being limited to its receipts and the interest made thereon; but we fear the estimate of one week per year for sickness throughout a man's life is below the general average, and that the remaining twenty shillings would be encroached on for, probably, a further five or ten shillings, leaving the amount to be placed to the member's credit very small indeed. Under this arrangement no member could impose on the Society. Whatever amount is drawn for sick pay, that amount the less is taken to his "rest account;" but we fear the five-pence per year will not meet the

management charges. At least, those Societies which are spending from forty to sixty per cent. of their receipts in management will regard it as very inadequate; and, seeing that the man of thirty is classed with the lad of sixteen, we fear there will be a further disappointment to its members, as there would be a difference of at least twenty-five per cent. in the sick pay requirements for these respective ages. Fixing the rate of payment at a uniform premium up to thirty years of age would also tend to induce delay in contributing. After thirty it is proposed to add sixpence per annum in respect of each and every successive year. We cannot resist the conclusion that more than a third of the sum which the essay sets forth as the amount that would accumulate yearly would vanish, and with it the compound interest built on it. It would also leave the member exposed to the risk of not being able regularly to continue his subscriptions, and though his would not expose him, as in many Societies, to the loss of what he had paid, it would, to the extent of such failure, curtail his provision for old age. How much better, if it can be so arranged, to have his club subscription paid up for life before his family expenses are weighing on him. The premium would not then encroach on his earnings when his family requirements are at their maximum. It would also lift him above the condition of potential pauperism, as, with his subscription paid up, neither sickness nor old age could reduce him to destitution.

The manual labour of the man of eighteen or twenty commands as good remuneration as that of the man of thirty, and we recently commented on an essay by an able writer who has suggested that this period of life should be made use of to secure provision for sickness, with pension at sixty-five, by making it imperative on every man at the age of twenty-one to pay the sum of £15, which the writer stated will command eight shillings per week in sickness to the age of sixty-five, and four shillings per week pension after that age. It is proposed that the man who cannot pay the fifteen pounds should leave two shillings per week in his master's hands till the fifteen pounds has been realised, the master to be responsible for the young men in his employ above the age of eighteen till they have their State certificate in proof of payment of their assurance. Two shillings per week from the age of eighteen to that of twenty-one would, according to the computation already given, secure eight shillings per week in sickness throughout life to the age of sixty-five, and four shillings per week after that age for life, thus raising the

man above potential pauperism by removing all risk of failure in his club payments, as they would be paid and done with before family expenses were upon him. Such reports as that before us tend to make the thoughtful look for something better than the almost hopeless muddle of multitudes of more or less insecure Societies taking the savings of the provident without being able to give them any real guarantee against destitution. We have on a previous occasion stated our preference for the system of a National Provident Society as a substitute for out-door relief without the compulsion that has been recommended; but at the same time we admitted that it was a smaller interference with the liberty of the subject to compel him to make provision for himself than to compel him to make provision for others, as we do now under the Poor Law. The proposal for making employers the collectors we entirely object to, and if that is a necessary feature of the compulsory scheme, as it seems to be, it is sufficient, we think, to condemn it. On the whole, then, we see no sufficient reason for going beyond the scheme which has been repeatedly advocated in these columns, though we welcome the discussion of any hopeful means of improving upon the want of a system which at present prevails.

HAVE WE FORGOTTEN LIEBIG—that giant of mental capacity, whose discoveries and the theories deduced from them have formed an imperishable basis for all agriculture everywhere and in all times? How puny and second-rate must appear, to any one who studied and appreciated that great man's works, the simple practical illustrations and confirmations of his theories and dictum: and yet these were for a long time disbelieved and opposed, but never confuted by proof of error! His mineral theory is riding now triumphant over error and prejudice, and we have at last learned the great lesson which he tried to teach us—that where the incombustible elements of plants are wanting in the soil, there can be no fertility of crop. Phosphate of lime and potash are now accepted as essential bases, while straw and chaff have gone to the winds, which contain the free ammonia that was for the first time only discovered there by Liebig. Is it not time—if not it never will be—when a monument shall record the immeasurable benefits which he has conferred on mankind? One rises from a profound study of his great works with a conviction that he has left little more to be done in the matter on the "Natural Laws of Husbandry"—the title of his last great work.—J. J. MECHI, Tiptree.

THE PROPOSED FLOWER AND VEGETABLE MARKET AT SOUTH KENSINGTON progresses slowly, and we do not doubt will come to grief. From the point of view of her Majesty's Commissioners, however, the proposal is at once ingenious and elegant. How attractive is the idea of letting off the arcades to florists and potato salesmen, and admitting the public free to roam over the grassy garden, and buy bouquets and cabbages direct, as it were, from the Royal Horticultural Society! From our point of view the proposal melts down into a serious joke, and we do not feel prepared to co-operate in carrying it into effect, even if, after all their labour, they find they have simply burned their fingers. Markets are not to be made to order, and arcades that represent the taste of the late Prince Consort are not to be lightly made contemptible in the eyes of the general public.—*The Gardeners' Magazine*.

## LIFE IN THE COLONIES.

## No. IV.

## NEW ZEALAND.

At this point it may be of special value to those who contemplate emigration, as well as interesting to the general reader, to go back and collate the experiences of the journey while the events are still fresh on the page of memory. In doing this, it is necessary to begin at a period anterior even to that of departure, the first stage, viz., that where the resolution to leave the old country is about to become fixed and decided, being by far the most important part of the entire undertaking. Before making the slightest attempt at breaking up the old home, it is well that heads of families should know their own minds thoroughly, and from relatives or acquaintances, if at all possible, have received reliable information, which gives them good reason to expect that the change to a new country will effect an improvement on their own position, as well as that of their sons and daughters. Abnegation on the part of parents for the welfare and future prosperity of their children is no doubt a highly commendable and right-minded feature in the character of all who practise it; but it becomes a serious matter when the feeling of self-denial involves the breaking up of old habits, leaving old scenes, the wrenching asunder of old and cherished friendships, and probably the giving up of old and familiar modes of earning a living. When a man is at all in a settled way of living in the old country, which enables him to be up to time in his payments with 20s. to the pound, he will scarcely, unless under very exceptional circumstances, be justified in giving it up for the sake of his family, after regrets in such a case being very apt to trouble him, and it is safer to send the children by themselves, according as they become of suitable age, to push their fortunes in the colonies. More particularly when a man is of mature age these considerations are highly important, and combine to make emigration a very momentous step, and it is well that he turns it over carefully in his mind before finally and irrevocably committing himself to it. Once decided on, however, all the energies of mind and body will be required to ensure success, even under the most apparently favourable conditions, as if it happens that regrets take possession of his mind much of his chance of a favourable issue is lost, as he cannot concentrate his energies on what is peremptorily required for the present, if his thoughts continually dwell regretfully on the past. Settlement in a new and sparsely populated country is no easy matter, when attempted with small capital, and in such a case it becomes doubly imperative for a man to familiarise himself with the subject in all its bearings, as years of perseverance and almost incessant toil will be required to make a position that will command a moderate share of personal and home comforts, although possibly having the advantage of being owner in fee of his own land. His very hired servants must share equally with him, while their wages—and that at a high rate—are ensured to them, whether the master and owner can count a profit at the year's end or not, they having the additional advantage of no risk, and a perfectly easy mind. With plenty of capital it will still take years of intelligently directed and almost untiring industry to create a property that will give a handsome yearly income, clearing, draining, and fencing being expensive and tedious operations, and great caution is necessary at the outset to choose land that will eventually have a prospect of doing this, as if a bad hit is made

in selection, there is not only much discouragement and chagrin to be undergone, but what is still harder to bear, a very heavy pecuniary loss, and the world in a great measure to begin over again; richer it may be in dearly bought experience, but a good deal poorer in purse. Either with or without capital, men in a respectable position of life, leaving the United Kingdom for the sake of their rising family, with all the social, religious, educational, and political privileges there enjoyed in such an eminent degree, must make up their minds that in so doing, they sacrifice much of their own comfort, happiness, and enjoyment of life for the sake of their children's future well-doing. Should they, however, really succeed to their utmost wishes in achieving this truly laudable object, it will be a source of gratification to them in their declining years, and they may then look back with complacency at the trials and troubles, and possibly many disappointments, they had to pass through after embarking on the often doubtful expedient of expatriation. The next great point is the choice of country—a subject of the utmost importance, as when breaking up one's home it is well to avoid a false step in again settling down, a second remove increasing the expenses and adding to the trouble and annoyance in a double ratio. At first sight, Canada and the United States present a considerable amount of attraction, principally by their proximity to Great Britain and the comparative ease with which they can be reached, and no doubt many thousands have bettered their position by removing to America, particularly when possessed of a little capital, which enabled them to choose a piece of good land in a favourable situation. But, taken as a whole, the climate of either Canada or the States is not particularly inviting to farmers from the British Isles, the scorching heat of summer, and withering and long continued cold of winter, presenting too great a contrast to the temperate climate of the old country, which seldom ascends or descends to either extreme. The seasoning fevers and accompanying ague, which in so many districts attack new comers with more or less severity according to constitutional predisposition, is another great objection, particularly to people of mature age. In the Western and more thinly-populated States, in many respects highly favourable to settlement, there has too often been exhibited an amount of lawlessness and reckless disregard of human life utterly repugnant to the feelings of men accustomed to peaceful neighbours and perfect security to life and property, and which has done much to check the flow of emigration to the far West. For these and other reasons, financial probably as well as social, public attention has of late years become largely directed to the vast field open for colonisation in the Southern Hemisphere, consisting of nearly the whole of the Australian Group, Victoria, New South Wales, and New Zealand being the most popular and attractive, the climate being genial and salubrious, and for the greater part of the year exceedingly pleasant to people from the British Islands, the Government fostering and popular, and a living to be made by industrial pursuits probably with greater chance of success than in any country north of the Equatorial Line. Of these New Zealand is at present commanding a large amount of attention, not only from the mercantile, speculative, and working populations of Great Britain and Ireland, Canada, and the United States, but from the

settlers in the various Colonies of Australia, who look upon it as an excellent field of emigration for their sons, great numbers of young men continually arriving from Sydney and Melbourne to "prospect," a term much used by the Australians when travelling with the view of looking for a desirable location. These men prefer New Zealand to Australia on account of the climate being more temperate, and therefore more enjoyable and healthy, as being moister on account of its configuration bringing it in comparative proximity to the ocean in its entire length, and its consequent immunity from the appalling droughts which so frequently cause such wide-spread destruction to the flocks and herds of the Australian Colonies. Again, while the useful land within at all a reasonable distance of the coast is a definition which in Australia implies something immense), has been all taken up, and to get at fresh pastures the enterprising sheep-farmer must take his flocks a journey of many months, far beyond the limits of civilisation, where the foot of the bushranger never trod, vast extent of new land is yearly being thrown open to the public in New Zealand suitable alike for pastoral and agricultural farming, well watered, and seldom remote from water carriage, New Zealand having the immense natural advantage of being pierced far inland by numerous ocean creeks, forming a valuable aid alike to the commerce already established, and to rapid colonisation. The land at present possessed by Government is likely to be soon greatly increased, negotiations for the purchase of large blocks of the very best land still in the hands of the aborigines having been in progress for some considerable time, with every prospect of being satisfactorily concluded. The climate and soil of New Zealand being favourable to agriculture in all its branches, a man may, on settlement, enter at once on the pursuit of that for which he considers he has the most aptitude, or, as is now done satisfactorily and with the best results in the Old Country, he may combine the pastoral and agricultural; and if while growing winter food for his stock he at the same time provides them with sheds, and consumes the food in-doors, he places himself in a position at the very outset which has a good prospect of making him in a few years by industry and perseverance a prosperous and thriving man. Winter shelter for stock implies two modes of management, the one money-making at the present, and the other in the future, both of which are essential elements of success, and the neglect of which keeps large numbers of settlers in a continual struggle to make all ends meet. By growing winter food, and feeding in sheds, the summer beef is first of all kept on the animals, they are finished properly, and can be turned into cash at the scarce season of the year, when the price of meat is at its highest, instead of a sale being forced in autumn to positively get rid of them, whatever the price ruling in the markets, to prevent a heavier loss in the future. If the second point, manure is made from the outset, and in the trouble is taken to place it on the land the permanent resources of the soil are husbanded and retained, instead of being exhausted. The importance of this mode of farming many a settler finds to his cost, often, however, when too late, as preserving the natural fertility of the soil, and recovering it when exhausted, are two very different things in any country, and quite as much so out here as anywhere, the former being easy and simple, although avoided as if it were the opposite, while the latter is distressingly up-hill, and often unattainable by any amount of exertion or outlay. New Zealand at the present moment certainly enjoys the distinction of being the most popular of the British Colonies, and, as a field of emigration, is attracting the most attention, while trade and commerce, export and import, and her extent of railway is the largest per head of the

population of any country in either hemisphere. Assuming, then, that the intending emigrant makes up his mind to settle in New Zealand, I will now shortly trace his course from this important point to that in which, if possible, more important still, he settles down in his new home, which will be an erection of wood, with the unfailing verandah, the view from which, according to the part of the country in which he settles, will be bounded by forest, whose trees are of enormous size—the growth of ages—or it may be by an apparently interminable thicket of Ti-ti scrub, hill-ranges stretching as far as the eye can reach, or grand mountain chains whose snow-capped peaks are lost in the clouds.

In winding up their affairs by a public sale, most people are apt to make a thorough clearance, imagining that the trouble and expense of taking only articles other than wearing apparel would much more than counterbalance their value. This, however, does not necessarily follow, as a fair measurement for luggage is given by the ship to each passenger, and therefore when the party consists even of a moderate-sized family the space they are entitled to becomes considerable. Even should the goods taken exceed the ship's allowance, the charge does not amount to so very much, freight to the colonies being, by no means high, and paying passengers are invariably treated with much leniency in the matter of extra space. Every familiar object, light and easily packed, should be rigidly retained—a designation which includes all pictures, paintings, ornaments, and books, &c., when placed in as nearly as possible their old positions in the new home they become valuable far beyond their intrinsic worth, as, by virtue of the old associations which are called up by their presence, the oppressive sense of newness is in a great measure dissipated, and the unavoidable home-sickness modified, or altogether averted. The latter mysterious influence of change of scene upon the mind of man, unexplainable and incomprehensible, inasmuch as it is all-potent alike with those who have left a poverty-stricken home, and attained a better position as with those who may have left comparative affluence, and have had to begin a struggle with the world to which they were quite unaccustomed and suited by previous habits, should be especially guarded against, as it often leads to bad health and incapacitates both mind and body to a serious extent. A select library of standard works should by all means be retained, as they will prove valuable companions in the hours of leisure, and this should be more particularly attended to, as in New Zealand there are as yet no opportunities of getting cheap books as at home; all must be bought new and at high prices. Over and above this, the charm of a family having their own books, the associates of their life, with whose every page almost they are familiar, is something pleasing beyond expression, and the young people can consult the *Encyclopædia* or *Atlas* for information on all difficult points as in days of old, books which if sold when leaving England would not realise as many shillings in England as they would cost pounds out here. The mistress of the house will very naturally be anxious to bring all her bed and table linen, which is a very sensible thing to do, as all such articles must be purchased on arrival, and the loss if sold, and the higher price which should be paid when purchased in the Colony, would amount to a sum far exceeding anything that might be charged for freight. Household linen being very heavy when packed close in considerable quantity, the boxes containing it, require to be of strong construction, and well hooped, as the strongest dovetailing is often torn asunder by the weight when being shipped or unshipped, and it is exceedingly awkward for a box to part asunder when hanging in mid-air by the chain, and its contents to fall in a shower on the deck, or possibly

into the water, which is worse, *contretemps* which, however, happens often enough. Carriage harness, which often goes at a sacrifice when sold by public auction, is also well worth taking, if at all sound, as also all bridles and saddles and other horse-gear, as in New Zealand riding and driving horses cannot be done without, the distances between the settlements being so great, and good harness is dear, a set of single harness worth buying costing from 12 to 14 guineas. Carriages of all kinds are also high in price out here, those principally used being of American manufacture, of very light construction, and no room for luggage or parcels of any kind save the merest trifles. The substantial waggonette and dog-cart so familiar at home in connection with country residences are also highly suitable here, and can be had to order, although the price is high, and even the money that must be paid for a second-hand article of this kind will rather astonish new comers, although by-and-bye they get familiar with everything, particularly high prices in all but the absolute necessities of life. In taking the passage out it saves no end of trouble and inconvenience to do so direct to the province where the emigrant intends to settle, this being also desirable for economical reasons, as travelling in New Zealand is an expensive affair, and any journey undertaken by sea must be calculated in pounds instead of shillings as in the old country, and is altogether out of comparison with the expense of the journey out, which, considering the accommodation given and the enormous distance travelled, is a very marvel of cheapness. The New Zealand Shipping Company, and Shaw, Saville, and Co., both own a splendid fleet of ships, making the passage in little over 100 days from anchor to anchor, and have enjoyed an extraordinary immunity from accident throughout a lengthened series of years, showing how careful they are in the selection of their ships, as well as the superior character of those entrusted with their management. Many of their voyages have more resemblance to an extended pleasure trip rather than the rough vicissitudes which are popularly supposed to be inseparable from ocean travel. If present negotiations are brought to a successful issue but a short period will elapse, when there will be a line of steamers from London direct to one or more of the New Zealand ports, a mode of communication now much wanted on account of the rapidly increasing trade, and which will prove a great convenience to passengers, as the time will be reduced by half, a matter of much importance, if only on account of its reducing the period of inaction unavoidable in the sailing ship however smooth and at times pleasant the passage in the latter may sometimes be. On landing, no matter what the circumstances as regards pecuniary affairs, a house should be at once taken for a short period to give time for looking about and getting familiarised with the country, and *hotels* rigidly avoided, as for families the expense becomes ruinous, as notwithstanding the low price of meat and moderate value of most other articles of consumption, the charges are excessive. In the case of young men they are equally to be avoided, as with them living in a hotel becomes excessively dangerous on account of the temptations of such places, and they will do well to live from the first with a private family, or in a temperance boarding-house, of which there are many conducted with every attention to home comfort and respectability, and whose associations are of a totally different class and style to those of hotels, the latter, however useful in one way, appearing to me to be the curse of the new country as well as the old. The long lists that appear every day in the papers of properties to be sold, most of them partially cleared, with dwelling-house, garden, &c., seem to assure the new comer that he will have no trouble whatever in settling down comfortably, the choice being

seemingly so great, and the terms so easy and convenient. Generally only a small payment in land, and the remainder spread over a series of years at a fixed percentage, the title deeds to be retained as security until the payments are concluded. This, of course, makes possession of a settlement a comparatively simple matter, as they are offered of all sizes, from the Government block to the humble allotment; but, notwithstanding the great range of choice, the utmost caution is required in selection, and no one on any account whatsoever should commit himself in the slightest way until he has made a thorough personal examination of the property, and ascertained the character of the soil, quality and supply of water at all seasons, and capability for carrying stock and the growth of corn. No paper should be signed, or money paid, on any pretence or under any circumstances, until this is done, no matter what the character or respectability of the vendor or agent who has the carriage of the sale. Naturally enough the description given by those who are anxious to sell is apt to be flowery, and the purchaser may in the office of the agent have come to the conclusion that the land he was treating about was all clover, when in reality he finds on visiting it that the bulk of it is covered with Li-tree or fern. It is much better and safer for a stranger to the country to take ample time in his selection, and to be in no hurry, travelling about a good deal so as to become familiar with the different varieties of soil and the natural growth by which these are covered, there being no better guide to quality, and in a few months he will be able to judge for himself. This, combined with the knowledge of locality which he has gained, and the general modes of management in clearing, fencing, and the preparation of the soil for future cultural operations, will enable him to fix on a farm or block of land with some certainty of success. In the meantime his money is not quite idle, as the rate of interest given by the banks is  $\frac{1}{2}$  per cent for fixed deposits at three, and 5 per cent. at six months, many sound investments in the old country paying no more, and which enables a man to live while engaged in looking about for a suitable position without trespassing much on his capital. This high rate paid by the banks makes it worth while to forward cash from London by the mail, according as it is being realised at the wind-up, and while preparations to leave are in progress, as if the duplicate of Exchange is forwarded at the same time, and the necessary instructions given by letter, the interest will accrue while the owner is on the voyage. Men with but small capital, and who have been accustomed to give a hand at the various farm operations while at home, cannot do better than take a situation for a time, as the knowledge that they are earning something adds largely to their happiness, and vastly lessens the danger of regrets and homesickness, besides giving them an excellent opportunity of picking up useful information in regard to future settlement on a homestead of their own. Luckily in this country employment is plentiful and well paid, so that no one need remain idle who is able and willing to work. What are called easy or genteel situations in the old country are, however, few and far between, and very difficult for a new-comer to obtain, unless he is specially talented and influentially recommended by a valued business correspondent. Such situations include bank and ordinary clerkships, shop assistants, and the like, and all right situations by which the possessor of a smattering of education hopes to evade the necessity of living by manual labour of any kind. In direct contradiction to this class, men who have served their time to a mechanical trade are unusually independent out here, and their services in continual demand at high wages, carpenters, builders, and engineers being paid from 10s. to 15s. a-day, a rate which, combined with the moderate, say in some

cases, as in that of meat, very low price of provisions, enables them to lay past money very fast, when of frugal and temperate habits. Assuming that the intending settler has considerable command of capital, he will avoid going into the bush, which is dreadfully expensive and up hill work, even although the cost of the land is but a trifle, and is no way suited to a new comer, as it excludes him from society too suddenly, deprives him of educational advantages for his children; and although having charms of a certain kind to those reared to it, I do not see that it presents the slightest attraction to men whose habits have been already formed in a totally different mould. Purchasing a farm or station on which a good deal has been already done in clearing, fencing, building, and laying down with English grasses is the safest procedure for strangers, and greatly lightens the burden, paving the way for early success, as the business of buying and selling begins at once. At the moment of settling down, much caution and strength of mind are required to avoid falling into a mistake common apparently to all countries—viz., that of taking more land than is justified by the amount of capital available to work it. When this is done, the fatal imprudence of borrowing largely is sure to follow. The facilities for obtaining money on a good title, and with the unexceptionable security of a particularly well cleared farm being unusually easy in this country; but the system, although fair to the eye and presenting golden attractions to the eager and possibly enthusiastic borrower, is thoroughly rotten, and proves a very sword of Damocles in too many instances over the heads of those who become involved in its meshes. The bank rate of discount is 10 per cent., in itself a heavy charge, although the safest if a man must borrow, as the bank will not foreclose while a chance remains of its debtor recovering himself, and in any case will take no undue advantage of his position. Possession at length taken, and the pastures stocked, every energy of mind and body will be required to get everything into working order, and if the season is suitable, the manufacture of butter and cheese at once commenced, all the members of the family capable of doing so rendering willing assistance, and for a time at least casting all genteel notions to the winds, as here as well as at home they form a most serious drawback to material prosperity. Many practical men, instead of purchasing land and thereby sinking their capital, prefer hiring land at an equitable rent, and this feeling is gaining ground, more especially as many have found to their cost that there are worse things in connection with farming than paying rent. The system of letting land as in the old country begins to prevail, and will undoubtedly extend rapidly, on its merits becoming properly understood by the large land-owners. Already some of the most practical and well-to-do farmers in many districts are tenant-farmers, holding on lease from seven to twenty-one years, and paying a high rent, adhering much closer to the rules of good husbandry than those who farm their own land. Not a few of the old-established settlers, who have their position made, and the whole of their land cleared, drained, and fenced and stocked, and who own, say, even the moderate extent of from 1,000 to 1,500 acres, could vastly improve their annual income by letting half the land they hold to respectable men of industrious habits, in suitable lots, the rent they would receive being far ahead of what they themselves made by the desultory and unmethodical system of sheep farming they now pursue, in which the receipts for wool is nearly their only dependence. These very men, by having their estates thus abridged, what remained would be better looked after, and more capital being employed to the acre, the resources of the soil would be developed in a correspondingly increased ratio. Concentration of capital and energy would thus

largely conduce to individual and colonial prosperity by enabling those who followed it up to improve their flocks and herds by the introduction of pure bred animals, and, by using bone-dust and farm-yard manure, carry out a system more or less extended of convertible husbandry, which in all temperate countries must ever be the most substantial and lasting foundation of agricultural prosperity. There is, however, a certain well-known association of ideas connected with the possession of land in all countries, exclusive and aristocratic, and which tends to holding with the utmost tenacity, even at a serious annual loss, the broad acres which invest their owner with that dignity and consequence in the eyes of his fellow-men which seems to be cherished by the human mind as one of its dearest and most valued privileges. Deeply imbued with these feelings, there are men who would be ashamed to let even an acre, however advantageous the offers which might be made to induce them to do so; but, on the other hand, the system gains in other ways, the property of minors, widowers, and of men who have retired, or gone to Europe for a time, being let to tenants for a greater or less number of years as already noticed, and large rents paid when the soil is alluvial or volcanic. Whether a man buys or rents land, he should be eminently careful that it is of such quality as will enable him to meet all demands and live respectably, as bad land anywhere is a continual heart-break, but in New Zealand especially so, inferior stock, the inevitable product of poor land, being worth so little. Far better would it be in a country such as this, where labour is well paid, to serve others during one's whole life, than to live in chronic poverty, overpowered by vain and unavailing regret, on a wretched block of land, on which, although nominally his own master, his utmost efforts cannot do more than provide the bare necessities of life.

### BIRMINGHAM SHORT-HORN SHOW AND SALE.

At the eleventh exhibition and sale of pure bred short-horns to be held in Bingley-hall, on Wednesday and Thursday, the 5th and 6th of inst.

The following are the numbers to be offered in the respective classes, a number of entries having been returned on account of arriving too late, or not being qualified under the new rules of the Short-Horn Society:—

Class 1.—Cows over 3 years old.....	45
Class 2.—Heifers over 2 and under 3 years.....	9
Class 3.—Heifers over 1 and under 2 years.....	12
Class 4.—Heifer Calves.....	10
Class 5.—Bulls over 10 and under 20 months.....	19
(Champion Class).....	17
Class 6.—Bulls over 20 and under 30 months.....	9
Class 7.—Bulls over 30 months.....	59
Class 8.—Bulls over 15 and under 20 months.....	78
Class 9.—Bulls over 12 and under 15 months.....	128
Class 10.—Bulls over 6 and under 12 months.....	

Total..... 384

The champion and other classes for young bulls will include several winners at the R.A.S. at Bristol, the B. and W.E.S. at Oxford, the Lincolnshire, Hants and Berks, Worcester, and other important shows, whilst the long array of exhibitors or breeders, containing such names as Earl Ducie, the Earl of Bective, Lord Moreton, Colonel Kingscote M. P., H. Alsopp, Esq., M.P., Messrs. E. Bowley, J. Harward, H. J. Sheldon B. St. John Ackers, A. H. Longman, &c., men who have made their names famous as the upholders of the purest, and best types of short horns, proves that the breeding of the stock sent will be quite on a par with the individual merits of the animals.

The judging by two sets will commence punctually at nine, on Wednesday, March 5th, the auction at eleven on that day, when the first seven classes, comprising all the females and about fifty of the bulls, will be sold, and the residue, comprising nearly 270 bulls, all yearlings, will be sold on Thursday, March 6th.



## THE FALL IN PRICES.

At the meeting of the Statistical Society, held one evening recently at the Society's rooms, King's College, an able paper on the fall of prices of commodities in recent years was read by Mr. R. Giffen, of the Statistical Department of the Board of Trade. The chair was taken by Mr. Shaw Lefevre, M.P., President of the Society.

Mr. GIFFEN commenced by saying there was a general agreement that during the last few years there had been a heavy fall in prices. The fall in cotton and iron and the various manufactures of both was notorious, while the losses in almost every description of trade left no doubt on the subject. It was usually a fall in price which crippled the weaker borrowers and caused bad debts, and that made the beginning of losses by which stronger borrowers were crippled; further falls in prices ensued, and more bad debts and losses were produced. When we saw so many failures as were now declared, we might be quite sure that they were preceded and accompanied by a heavy fall in prices. But the question for statisticians in such a matter was not the fact of a general fall, but whether it could be measured and compared with other facts of a similar kind, and whether there was anything to show the fall to be of a more or less permanent character, and not merely a temporary fluctuation which would be corrected by an immediate rebound. He had come to the conclusion that not only was there a decline of prices at the present time from the high level established a few years ago, but that this decline was more serious than the downward fluctuation of prices usually exhibited in dull times, and that it might be partly of a permanent character, unless some great change in the conditions of business should occur at an early date. To show the extent of the fall, Mr. Giffen compared the prices of leading wholesale commodities on the 1st of January, 1873, the period of *maximum* inflation, with prices of the same article on the 1st of January of the present year. Thus Scotch pig iron fell per ton from 127s. to 49s.; Straits tin, from £142 to £81; coals, from 30s. to 19s.; wheat, per quarter, from 55s. 11d. to 30s. 7d.; cotton, per pound, from 10d. to 5½d.; wool, per pack, from £23 to £13. We should hardly have expected beforehand, he remarked, after quoting a series of figures, that prices of wholesale articles not selected with a view to make out a case, but impartially chosen years ago as representative of the markets, would exhibit a fall in the last six years ranging from 66 per cent. in the most extreme to 10 per cent. in the least extreme case, and ranging, with three exceptions only, between 26 and 66 per cent. With regard to the causes of the fall there was, to a certain extent, no doubt or mystery. But there was something more to be accounted for than a general fall of prices—viz., the lower level which had been reached as compared with the last period of depression following 1865. This lower level he attributed to three causes—the extreme and prolonged discredit, the bad harvests, and the extraordinary demand for gold. With regard to the first cause, it was difficult in such matters to compare one time with another, and probably in every time of depression there was a feeling that things were never so bad before. He recollected perfectly well after the 1866 panic the languid and despairing feeling which pervaded the city for two or three years, when there was a prolonged reign of 2 per cent., and for a time discount houses were barely paying 10s. per cent. for deposits. A famous article was written at that time in the *Edinburgh Review* on the strike of capital, and people blamed Lord Clarendon for having made matters worse than they were ever known to be before by the explanatory circular he sent to our representatives abroad with reference to that panic. The Overend failure had also been unprecedented, and so people were satisfied that the depression was the worst. But, in spite of the gloominess of affairs after 1866, it must be admitted that what came to light then was not so calculated to cause discredit as the revelations of the last three or four years. With regard to the second cause, he noticed as probably contributing to the severity of the fall the bad harvests of the three years, 1875, 1876, and 1877. It had long been an axiom of economists that nothing so powerfully conduces to a depression in trade and a consequent fall in prices as a succession of bad harvests. The wheat harvest, to begin with, was undoubtedly most deficient. According to Mr. Caird, taking the average yield of the last 30 years to be 109, the yield of 1875, 1876, and 1877 was respectively 78, 76, and 74. In

other words, our wheat harvest was deficient by one-fourth as compared with the average, and much more, of course, as compared with a good year for three years running. The usual rise in wheat and bread had not followed, owing to the very fact that the home yield was now less important than the aggregate foreign importations, but other effects of a deficient harvest must have ensued. Nor was there any compensation in the yield of grass and root crops, but the reverse. Here we could not measure the yield in the same way, but the diminution of the stock of cattle and sheep in the three years ending 1877 was most marked. In Great Britain, between 1873 and 1877, there was a total reduction of 427,000 in a stock of 6,125,000 cattle, or about 7 per cent. in three years. In sheep there was a total reduction of 2,153,000 on a stock of 30,314,000, or 7 per cent., in three years. The third cause was the extraordinary demand for gold for the new coinage of Germany, and for the United States on its resumption of specie payments during the last few years. It was a little difficult to consider this point except in connection with the question of the supply of gold, and any variation in that supply which might have occurred; but what he desired to bring out was that apart from a permanent diminution of the supply, whether absolutely or in relation to the growing wants of the world, which would necessarily have a permanent effect on prices, extraordinary demands like those referred to would tend to produce a momentarily extreme fall. Altogether during the last six years Germany had coined 84 millions of gold, very little of it being recoinage. The accumulation of gold in the United States, principally during the last two years, amounted to about 30 millions sterling, the stock of gold in the country above what it had for several years previous having been increased by that amount. These two sums amounted to 114 millions, and if we allowed for other extraordinary demands, such as that for Holland, which had been substituting a gold for a silver money, and at the same time made deductions for what Germany might have recoined, we might say in round numbers that the extraordinary demands for gold during the last eight years had amounted to 120 millions, or 15 millions a year. As the annual production of gold eight years ago was estimated at from 20 to 22 millions only, and had since rather fallen off, it was quite plain that these extraordinary demands could have left very little for the ordinary wants—the wear and tear of coinage, losses, use in fine arts, and new coinage to correspond with the wants of populations increasing in numbers and wealth. These three causes, then—the extreme and prolonged discredit, the bad harvests, and the extraordinary demands for gold—appeared to have occurred in bringing prices of commodities to the lowest level which had been reached at any period for many years. That they would be sufficient to account for much of the effect which had been produced could hardly be disputed, and that they had existed was beyond all doubt. The question was infallibly suggested, however, whether in addition there was not a subtler cause at work—an actual insufficiency of the current supply of gold for the current demands of gold-using countries. This was quite a separate question from the effect of the extraordinary demands which had been described, and it seemed most important that we should keep it separate. His own opinion was that some such cause might have been at work, though whether its effects would have been at all marked as yet, in the absence of the extraordinary demands might be doubted. The main presumptions to this effect were—first, the undoubted falling-off of the gold supplies during the last 20 years. The estimated production of gold in the years 1852-73, in quinquennial periods with the several averages for each period, were—1852-56—total production, £140,665,000; annual average, £29,933,000; 1857-61—total production, £123,165,000; annual average, £24,633,000; 1862-66—total production, £123,800,000; annual average, £24,760,000; 1867-71—total production, £108,765,000; annual average, £21,753,000; 1871-75 (four years)—total production, £76,800,000; annual average, £19,200,000. The difference of an annual yield of from 25 to 30 millions between 1852 and 1861 and an annual yield of less than 20 millions at the present time was palpable. Of course the question was not settled by this consideration. One of the effects of the great gold discoveries was to create new markets for gold itself. Under its bi-metallic régime France replaced an enormous stock of silver by gold, and, becoming a gold-using country, absorbed the new supplies to an enormous extent. India, again, absorbed an immense sum especially during

the years of the cotton famine, when her credit abroad was so suddenly and so enormously augmented. Until 1866 it might be said the market for gold was so affected by extraordinary demands that there was hardly time for prices to settle down into a normal state, and the full effect of the new supplies on gold-using countries alone was never fully tested; but it was at least obvious that the diminished supply could not now meet the extraordinary demands which were met by the supply of the earlier years, even if the ordinary demand had continued the same. Not only did the figures show an actual falling-off of supply, but there was a probability of the supply being obtained at a greatly increased cost of production. The 19 millions now produced were obtained with more effort than the 30 millions 20 years ago. This meant that if prices were to tend upwards, a check might be put upon the movement by a still further falling-off of the gold supply. It might not pay to work mines which were now profitable if prices all round, necessarily including wages as well as commodities, were to rise. We came then to the question whether ordinary demands had continued the same, to which the answer must of course be that, coincident with the gradually declining supply of gold, there must have been an enormous increase of current demands. Having examined this point at some length, the conclusion which he came to on the whole was that he saw no other outlet from the situation than in the gradual adjustment of prices to the relatively smaller and smaller supply of gold which must result from the increasing numbers and wealth of the populations of gold-using countries. The fact of a fall of price such as had been described explained a good many things, while the consequences of it, or, to speak more correctly, perhaps, of the more permanent of the causes which had contributed to it, must be far-reaching. First, we had a sufficient explanation in the fall of price of much of the falling off of trade, especially our foreign trade, which was the occasion of so much alarmist writing. Indeed, it was sometimes said that the foreigner was taking the bread out of the mouths of our manufacturers and the men whom they employed. He had never seen this view supported by any careful examination of what the growth of the trade of foreign countries really was, or by a consideration of what went on in our trade generally, and not merely in particular trades which might be affected here and there by the pressure of foreign competitors. What if there was no falling-off, or no material falling-off, of our trade at all, so that all this writing about our decaying trade and the gain of foreigners at our expense was only so much writing in the air? It was clear that an average fall of 20 or 30 per cent. in prices must make all the difference in the world. The exports of British and Irish produce showed a falling-off in total value between 1873 and 1877 of about 23 per cent. The exports in 1873 were £255,165,000; in 1877, £193,893,000—a reduction of £56,272,000. A comparison of figures extracted from the report of the Board of Trade showed that while the aggregate declared value of the enumerated articles in 1877 was £147,801,000, their aggregate value at the prices of 1873 would have been £191,530,000, which was within a million of the aggregate value of the exports of the same articles in 1873. There were variations in the quantities of the articles, some increasing and others diminishing between 1873 and 1877; but the upshot was that if the prices of 1873 had been maintained all round in 1877, the returns as far as the unenumerated articles were concerned, and presumably as regarded the remaining articles of trade where the entries were mostly by value only, would have exhibited no decline at all. In passing, he remarked that much of the prosperity of years like 1873 was in reality hollow, and much of the dulness of dull times was due to the fact that people were forced to acknowledge themselves not so rich as they thought. Having adverted to the possible connection between the appreciation of gold and the depreciation of silver, he said that the next point to notice was the connection between a great fall in the prices of commodities and a fall in wages. The two things were inseparably connected. Firstly, in certain trades—and this connection had been specially shown of late years in the iron trade—the gross price of the articles produced was so much diminished that if the cost of labour was unaltered the labourer would be receiving an enormously increased share of what was produced. Say an article formerly selling for £20, the cost for labour being one-fourth, or £5, falls in price to £10, then the £5 given to the labourer would be 50 per cent. of the selling price. It was incredible that so

great a change could occur without the labourer being affected, and there had been even greater changes in the iron and coal trades. But, secondly, in almost all trades, especially those in which the cost of labour constituted a large part of the cost of production, there was necessarily some connection, in the long run, between the money rate of wages and the prices of the usual articles of the labourer's consumption, according to his standard of living. It was quite plain that the real wages paid by the capitalist to the labourer consisted mostly of commodities; if money wages remained the same while commodities fell in price, there was an increase of real wages. In some way or other, then, an adjustment of money wages to reduced prices became inevitable. The "moral" of much that had been said was clearly this—that the scarcity of gold which had contributed to the present fall of prices, and might have further serious effects in future, should, if possible, be mitigated, and should, at any rate, not be aggravated by legislative action. To give only one illustration: few things were more unlikely than that £1 notes, or notes for less than £5, would again be reintroduced in England; but the introduction of such notes alone, with all suitable arrangements for their convertibility, would certainly go far to neutralise even such another extraordinary demand as that for the German coinage. There seemed a possibility of gaining something, then, by reintroducing £1 notes if the present gold scarcity should continue. He hoped he should not be understood as advocating such a change, or as being insensible to the weight of many practical objections which could be urged against it if it were immediately proposed. He was only mentioning it as a possible expedient for economising money, and there were no doubt others. As regarded small notes, however, it would seem that at least any change by countries which still retained them in the direction of their further abolition, leading to a greater demand for the precious metal, ought to be deprecated. Still more we ought to deprecate any change in silver-using countries in the direction of substituting gold for any part of the silver in use. It would be nothing short of calamitous to business if another demand for gold like the recent demands for Germany or the United States were now to spring up. Even a much less demand would prove rather a serious affair before a very long time elapsed.

**OLD STYLE IN THE HEBRIDES.**—Although the news comes rather late—my informant lives in a lighthouse some fourteen miles from the nearest land, and the postal service is somewhat capricious—I think it may interest some of your readers to know what rapid strides civilisation is making in the Hebrides. A public meeting was held in the island of Iona just before the beginning of the present year to consider whether New Year's Day, as a festival, should not be transferred from the 12th of January, on which day it has hitherto been kept, to the 1st of January. It was unanimously agreed that the old style should be abandoned, but only in the event of the Dunara Castle—the steamer that periodically makes the circuit of these outlying islands—being able to call and leave behind it a fair and reasonable quantity of that beverage, without which, in the Highlands at least, a holiday is not of much use in making glad the heart of man. However, as ill-luck would have it, the weather proved very stormy as the Dunara was on her way south, and it was found impossible to land anything. Accordingly, the natives of Iona fell back on the 12th of January as New Year's Day; but it will be seen that that was not at all their fault, but the fault of the weather, which has been seriously to blame pretty nearly everywhere for some months back.—W. B. in the *Daily News*.

**HOW TO GET RID OF POLYGAMY.**—Khalil Pasha was very fond of Western customs, and he used to assert that it would not be so very difficult, after all, to raise Turkey to the level of the great Powers. "Still," objected some one, "there is the barbarous habit of polygamy, which it would be difficult to uproot." "Polygamy!" exclaimed Khalil. "Were I the Grand Vizier, I would simply declare that every Mussulman has this option, as before, of keeping four wives. Only I would exact from him the obligation of keeping his mother-in-law as well. You would see then what would become of polygamy!"—*World*.

## THE POINTS OF THE CLYDESDALE HORSE.

(From the *Clydesdale Stud Book*.)

The oldest judges of Clydesdale horses in the Upper Ward of Lanarkshire are of opinion that the Clydesdale horses of the present day differ little from those which were sold at Lanark and Rutherglen Fairs. Few of them will allow that they have been improved during the last 30 or 40 years; and many maintain that horses in old days were better furnished with bone, their legs better fringed with hair, and in general were much sounder than those for which high prices have been paid during recent years.

More attention was paid by breeders in past days to the head of the horse than, unfortunately, is now the rule, and recent exhibitions show a sad lack of this prominent feature of our Scottish draught-horses. Judges of the Highland and Agricultural Shows and of other less important exhibitions have not attached such importance to this point as they should; and horses and mares with narrow, clean-out, or what are termed "hard heads," with a prominence of bone, but narrow between and above the eyes and having no room for brain, have been placed high on the prize-list.

The head of the typical Clydesdale is very different from this. He has a broad jaw, ending, as a rule, in a not very fine or well-tapered muzzle, but with large open nostrils. His eye is usually full and vigorous, yet mild; his forehead broad and full between the eyes; while from the eyes the forehead tapers gradually upwards to the ears which are long and active. Breeders of Clydesdales should attach considerable importance to these points, as a horse of such a description will generally be found to be of excellent temper, easily trained, docile, and very wise in cart or plough.

Experience alone can teach one when the head is well set on to the neck; but the latter should be strong, massive, and of medium height; while the shoulder should be more oblique than in the English draught-horse. This, indeed, is one of the distinctive features of the Clydesdale, as to his formation of shoulder is largely owing his long, quick step, for which he is so justly admired. The "upright" shoulder of the English cart-horse may certainly give greater power in the collar; but if shortness and slowness of step be considered this cannot be called an advantage. The English horse, besides, is more accustomed to sheer dragging and to working in chains, while his Scottish rival is chiefly employed in the two-wheeled cart, which occasions a considerable amount of weight being balanced on the animal's back. A medium slanted shoulder gives a horse, in such circumstances, an advantage; and doubtless those who carted the minerals of Lanarkshire in *ante-rail-road* days found this formation well adapted for their purposes. Even yet no one will affirm that it is unsuited to the traffic of the day if he will only take the opportunity offered for forming an opinion by the sight of the Clydesdale horses yoked to cart or lorry in the streets of Glasgow.

Good sound legs and feet are essential to all horses, and are certainly not undervalued in the Clydesdales; in fact some judges, in their admiration of such good qualities, frequently lose sight of "top" altogether.

Quite as essential as the slightly oblique and closely-topped shoulder of the Clydesdale for his long quick step is a strong forearm. This part, from a side view, should be broad; loaded with long, strong muscles, so as to give him full power to bring forward the part beneath; and in length should be proportionate to the length of the shoulder. A flat and broad knee is also essential; but this is a point sometimes overlooked by the best of Clydesdale judges, who prefer strength of bone immediately under the knee in many horses, and so the leg comes to the ground as if there were no joint between the elbow and the pastern.

Deficiency of bone under the knee has not infrequently caused the rejection of many good horses in the show-yard in favour of animals which happen to be thicker at that particular place, yet, have not had the strength, owing to the bone not being of the proper shape, or to the entire absence of sinew. The shank-bone should be flat from a side view, thick and gently rounded from a front view, and tapering to an edge as it goes back. The late Mr. Fulton used to say he liked the "razor-legged" ones, an expression which conveys the idea of what this part should be. The back part from the knee down should possess a nice flowing fringe of silken hair, which

should spring from the very edge of the bone. This hair should be of what a judge of a Skye terrier would style a "pily" nature; and good judges will not have a horse at all the feather of which has a coarse matted appearance. Possibly too much attention is paid by Clydesdale breeders to this point, and many will not exhibit at certain shows because their horses at the particular time happen to be what they term "bare of hair." The hair certainly creates a false impression of strength of bone, as an animal which has a broad forearm and well-developed knee, if deficient in "feather," does not compare well with one possessed of a nice flowing fringe several inches long; and this is decidedly disadvantageous; but the high value set upon nice silky hair is on account of its being in all cases a certain indication of a strong, healthy bone, as the hair of a short, coarse, matted kind suggests a decided tendency to grease. All horses have a tendency to lose their hair when being put into show condition (*i.e.* loaded with fat like a bullock), and so "blistering" it is to be regretted, is commonly resorted to to strengthen its growth. The hair produced by this process is not, however, so silken or so fine as the natural, and the difference is easily detected by the practised eye.

The sinews of the leg should be thick, strong, thrown well back from the bone, and capable of being felt with the hand; if not the leg is not a good one, however thick, as a soft, round leg, in which the sinews are not very well defined, will not stand work.

The lower end of the shank-bone, or fetlock, should also be large in all, so as to give full play to the tendons; and Clydesdale judges are also very particular as to this, and also to the pastern, which during the last few years has come in for a large share of attention. Youatt, writing on this point, says:—"The concussion which attends the common action of the cart-horse is little, because his movements are slow, and therefore the upright and strong pastern is given to him, *which he can force into the ground, and on which he can throw the whole of his immense weight.*" If Mr. Youatt had ever seen a draught-horse on the streets of Glasgow or any other large town, "forcing his upright and strong pastern" into the granite pavement, he would possibly have halted before he wrote the above sentence. No doubt an upright pastern suits well the upright shoulder and slow action of the English draught-horse, a conformation which can scarcely be called the best for any purpose; but it will not do in the Clydesdale, which requires a pastern to suit the formation of the shoulder, and to confer the necessary elasticity to counteract the concussion caused by his quick, firm step. Short, upright pasterns always get worse with age and feeding, and the action in due course of time becomes impeded. A horse with an upright pastern has little or no command of his foot, and literally walks as on a crutch; and if he has no power of his foot he cannot have much in his shoulder. The streets of Glasgow are very trying to horses, which have to scramble for a footing in the furrows between the hard, smooth paving-stones; and horses with upright pasterns are sometimes almost powerless to move, where those with pasterns moderately sloped, and of a medium length, can walk with comparative ease. Farmers around Glasgow are alive to this, and will not readily use a stallion which has this defect, however strong and shapely.

In districts removed from Glasgow, judging from the animals exhibited at the shows, they are less particular—doubtless because a horse with upright pasterns, which would render him useless for street work, might last for 10 or 12 years ploughing and carting on soft land. The horse, however, which stands the streets best is not the worst for the farmer; and as he only lasts for six or eight years at street work he is always in demand, so that his conformation and points should be carefully studied.

Without a good, sound, well-shaped, healthy foot, a horse is of no use at all, however symmetrical and strong. A dissertation on the form, defects, &c., of the foot is not required here; it suffices to state that the Clydesdale is generally sound on that point, though subject, like all other breeds of the equine genus, to its various diseases. Side-bone and ring-bone are said by veterinary surgeons to be less common than in the cart-horses of the south. Many Clydesdale stallions are lame from "founder," occasioned, in numerous cases, by over-feeding and want of exercise, but now become so common as to raise suspicions of its being hereditary.

An undue length of back is not an uncommon defect in the

formation of the Clydesdale, and flat, badly-sprung ribs—the last of the latter occasionally very short—form defects which it should be the object of breeders to remove. The back is not unfrequently low, and the horse at first sight looks as if he had no command of himself, the barrel merely forming a bridge between the fore and hinder ends. The chest is generally low, broad, and full, if the body is large and round-ribbed; if not, it is narrow, and the horse has a weak “wedgy” appearance; and in street traffic this want of breadth places him sometimes, in rounding corners, under command of the shafts of the waggon or lorry if at all heavily laden.

Broad, low-set hind quarters, with muscular thighs, descending into broad and proportionately-developed hocks, sum up the good points of the hind end of the Clydesdale. Narrow hocks are so subject to thorough pin, &c., that most breeders avoid them, though there should be no perceptible marks of unsoundness. Straight hocks are not liked; but if the other parts are proportionate and the action sound, no exception is taken to this formation. It is as a work-horse, however, that the Clydesdale should be considered; and it is questionable if a straight hock affords as much propelling power as one moderately bent. The muscles surrounding the hocks should be strong and firm; and objection is always taken to animals which have them loose and flabby, or which, to use a breeder's phrase, have “sloshy hocks.”

From the hock to the ground the leg should be short, broad, flat, clean, evenly, and straight or slightly inclined forward; the sinews standing out from the bone, and having a similar fringe of hair to that on the fore leg, and rising as high as the bottom of the hock-joint.

The hind pasterns are a little larger generally than the fore ones, and are more inclined, but not so much as to give the idea that they are not supporting the quarters. Short, steep hind pasterns are a very bad fault, as the animal is always sticking its toes into the ground.

The average height of the Clydesdale horse is about 16 hands 2 inches, though there are several stallions to be found as high as 17 hands, but very few over that height. The fashionable colour is brown, that of a deep dark shade preferred, and all the more so if dappled, while black is also common. Grey is not in favour, and few colts are kept entire of this colour unless very prepossessing otherwise. Grey mares are, however, used for breeding; and the number of grey foals occasionally produced by dark-coloured mares served by dark horses shows that the colour was very common previous to the rule which the Highland Society made in favour of “black and brown bays.” This rule, it has to be remarked, has long been obsolete, and is in no way accountable for the castration of colt-foals, as within the past 30 years grey stallions have taken some of the best prizes of the Highland and Agricultural Society. The colour is simply not liked, and few breeders on the Clyde side care to have their best mares served by grey horses. Clydesdale breeders are decidedly adverse to chestnuts; and in some districts a chestnut horse, however good-looking and strong, would not be made use of, and indeed would be regarded by many as of impure origin. An occasional roan is to be met with; but this colour is only regarded as an evidence of a stain of impure blood, neither chestnut nor roan being recognized as Clydesdale colours.

White markings are now very common, and have come to be regarded as a sign of purity of blood; few of the Clydesdale horses of the present day are without white on one of the legs while a white star or stripe on the face—“ratch,” as some breeders term it, if of the latter form—is highly prized.

In examining a horse when standing, a good judge will, in addition to running his eye over the various points mentioned, see that he stands even and firm on his feet, which in some horses are inclined slightly inward. To be the least inclined outward is a bad fault, and one which gets worse with age. As regards the hind legs, a glance will tell if they are all right with the animal and hocks close to each other, and the feet at the proper place for supporting the weight of the body, while at the same time giving the animal the fullest power for the use of the hind leg, in which lies nearly all the propelling power.

In walking, the horse should, if approaching you, come with his head well carried, and with an apparently measured stride, lifting his feet well off the ground, and placing them down again regularly, evenly, and with apparent deliberation.

On a side view one can notice if his action be even, *i.e.*, if

his fore and hind action be in unison; for in horses with long backs and weak loins the two ends seem to be under different control and the hind legs, being in a manner dragged with the toes along the ground, an unpleasant effect is produced.

In going away at a walk, a horse should plant his hind feet forward as deliberately as his fore ones, at the same time raising and bending the leg at the hock, which should be evenly carried forward. If the hocks are turned out in moving them forward, the action is not good; and a Clydesdale breeder considers this an exceedingly bad fault in either horse or mare, though it is one which is commonly overlooked south of the Tweed.

In trotting the horse should bend the legs at the knees and hocks, and from a hind view the inside of the fore hoofs should almost be seen at every step. If the animal be inclined to move wide behind, this fault will easily be discovered at the trotting pace.

#### ADVICE TO NEWSPAPER CORRESPONDENTS.—

The *Burlington Hawkeye* gives the following directions to its correspondents as to the manner of supplying manuscript:—Never write with pen or ink. It is altogether too plain, and doesn't hold the mind of the editor and printers closely enough their work. If you are compelled to use ink, never use that vulgarity known as the blotting pad. If you drop a blot of ink on the paper lick it off. The intelligent compositor loves nothing so dearly as to read through the smear this will make across twenty or thirty words. We have seen him hang over such a piece of copy half-an-hour, swearing like a pirate all the time—he felt that good. Don't punctuate. We prefer to punctuate all manuscripts sent to us. And don't use capitals. Then we can punctuate and capitalise to suit ourselves, and your article when you see it in print, will astonish, even if it doesn't please you. Don't try to write too plainly. It is a sign of plebeian origin and State school breeding. Poor writing is an indication of genius. It is about the only indication of genius that a great many men possess. Scrawl your article with your eyes shut, and make every word as illegible as you can. We get the same price for it from the ragman as though it were covered with copperplate sentences. Avoid all painstaking with proper names. We know the full name of every man, woman, and child, in the United States, and the merest hint of the name is sufficient. For instance, if you write a character something like a drunken letter “S,” and then draw a wavy line, we will know at once that you mean Samuel Morrison, even though you may think you mean Lemuel Messenger. It is a great mistake that proper names should be written plainly. Always write on both sides of the paper, and when you have filled up both sides of every page, trail a line up and down every margin, and back to the top of the first page, closing your article by writing the signature just above the date. How we do love to get hold of articles written in this style! And how we would like to get hold of the man that sends them! Just for ten minutes. Alone. In the woods, with a revolver in our hip pocket. Revenge is sweet, yum, yum, yum. Lay your paper on the ground when you write; the rougher the ground the better. Coarse brown wrapping paper is the best for writing your articles on. If you can tear down an old circus poster, and write on the pasty side of it with a pen stick, it will do still better. When your article is completed, crunch your paper in your pocket, and carry it two or three days before sending it. This rubs off all superfluous pencil marks, and makes it lighter to handle. If you can think of it, lose one page out of the middle of your article. We can easily supply what is missing, and we love to do it. We have nothing else to do.

ADVICE TO QUACKS.—The inventor or patentee of a medicine worth about £30,000 a year said to me the other day, “I made a dreadful mistake when I advertised my phisio as a universal cure. I should have been satisfied with naming about twenty diseases. I have another medicine in my head which I dare not advertise, because people would say ‘this fellow's a quack; he has discovered that his other mixture does not cure everything, and so he supplements it.’ Ah, Sir, Hol-loway is the prince of us, after all! He gives us a pill for half the ill of life and an ointment for the other half, and so has two sources of immense fortune which, though distinct, must be coupled by sick and sore people. My advice to quacks is, never invent a medicine to cure everything—for a universal specific leaves no room for a second attempt upon human life, that is, if it bears the name of the discoverer.”—*Mayfair*.

## CHEESEMAKING AND COMPETITION.

In these days of depression of trade and disturbances in the labour market, of farms to let and tenants needing a partial remission of rent, it is refreshing to find such an example of contentment, both among tenants and labourers, as is presented by Lord Tollemaiche's large estate in this county. Rarely too is mutual regard and good understanding between landlord and tenant seen in the degree exhibited at the meeting of farmers at Peckforton on Friday, the 10th inst. Of the three great divisions of British Agriculture dairy farming may be said to have best withstood the pressure, nay a certain portion of dairy farmers may be described as in a flourishing condition, for we are told "fine cheese sell at a remunerative price." Yet in this very article, cheese, the foreign competition is of a serious nature, as will be seen from the following figures:—In 1850 we imported 347,802 cwt. of cheese; in 1860, 553,283 cwt., or an increase of 67½ per cent. on the importation of 1850; in 1870, 1,041,281 cwt. arrived, showing an increase of 78 per cent. during the decade; in 1877 the arrivals of cheese amounted to 1,633,920 cwt., which is an increase of 57 per cent. on 1870. The bulk of this cheese came of course from the United States and Canada. Lately, however, numerous "Derby cheese" factories have been established in Holland, and export their produce mainly to this country. Cheese factories have also been established in the Baltic provinces of Russia; in fact, but a short time ago a number of Russians were learning the art of cheesemaking under an experienced factory manager near Chester. From the extent, and the rapid and continual growth of the cheese trade, it will be seen how probable it is that the present depressed prices of cheese will be still further reduced. Perhaps the most remarkable feature of last year's quotations of cheese is, that while the price of inferior qualities has during the last two years fallen 25 or even 30 per cent., the better qualities have not declined more than 7 or 10 per cent., and the very finest command almost as high a price as ever. An eminent American authority, when asked why home-made cheese of prime quality maintained its high prices, replied that the best home-made cheese had a distinctive flavour which factory cheese could never hope to imitate, and that consequently it had a select market free from foreign competition. The wisest policy, therefore, for the British dairy farmer and his landlord is that which for many years has been so warmly advocated by Lord Tollemaiche, and which he has consistently carried out to so great an extent on his estate, viz., to provide the tenants with the most convenient dairy arrangements, and to encourage them to adopt the most recent improvements in dairying utensils, and to lessen the cost of the production of cheese by economising labour, and increasing the yield of the land by draining and boning. Indeed, as far as his Lordship's estate is concerned there is no excuse for making bad cheese. His agent at the last rent day announced to the tenants that if any unsuccessful cheesemaker wished to improve in that art by receiving instructions from a good cheesemaker, his Lordship would arrange for them to receive that instruction, and would himself pay half the expense of obtaining it. We are glad to be able to record that Lord Tollemaiche is about to pursue this course more vigorously than ever, by offering exceptional facilities to his tenants to increase the yield of their land, and by continuing to give them every possible encouragement to produce better cheese. We commend the report of the proceedings at Peckforton to the attention of our agricultural readers. Both Lord Tollemaiche, and Mr. Siddons are practical men; both sound the same note of warning, viz., the extent and danger of foreign competition, and the necessity of using all possible care and skill in the production of cheese at home.—*Chester Chronicle*.

## BUTTER MAKING.

We often hear the complaint made by dairywomen that butter making in winter is the plague of their lives. They say, "It is so long in coming, and when it comes it is more like lard than butter." Now I think a little good management on their part would remedy both of these complaints. In the first place, never allow the milk to stand longer than 24 hours, and never keep the

cream too long after it is skimmed before making it into butter. The day before churning put the cream on the hot hob and just scald it. It not only makes it "come" so much more quickly, but helps to sweeten it, and the trouble of so doing is very little. As regards the colour, get a nice carrot and grate it out the day before you make your butter into as little water as possible, and let it stand the night, straining the juice off in the morning through a cheese cloth; afterwards put it into the churn with the cream. It not only gives the butter its true natural colour, but imparts to it a much richer flavour. In my opinion it improves it very much, and it is much better than any kind of "Butter Powder" ever made; and we know there is nothing in the homely carrot that is in any way objectionable. It is worth a trial.—*LILY VALLEY*.

## Agricultural Societies.

### BIRMINGHAM.

A meeting of the Council of the Birmingham Agricultural Exhibition Society was held at the Queen's Hotel, on Feb. 20, Mr. C. M. CALDECOTT presiding.

The question of the society holding a show of agricultural horses in Bingley Hall was discussed, and the following resolution was passed:—"That, while this Council heartily approves of the idea of holding an annual spring show of agricultural horses at Bingley Hall, the members present consider the time too short to make satisfactory arrangements for holding an exhibition next month."

It is intended, however, to carry out the original idea of a show on the 18th of March, by private enterprise; and the prize list has been drawn up on the model of that of the Short Horn show. From its liberal prizes and judicious classification it should have the effect of drawing a sufficient number of high-class horses to fill Bingley Hall on the day named.

The two classes for Clydesdales have prizes of £20, £10, and £5, for both stallions and mares. Other agricultural horses have seven classes, viz. for stallions, four years old or upwards, with prizes of £20, £10, and £5. Others for younger entire colts, with prizes of £20, £10, and £5, and downwards with somewhat similar amounts for mares and geldings.

### CLEVELAND.

The annual show of thoroughbred and draught horses in connection with the Cleveland Agricultural Society was held on Tuesday, Feb. 10, at Guisborough. Though a comparatively new feature of the Society, the exhibition having been established in 1876, its good effect in the way of creating a healthy stimulus among farmers throughout the district to improve the breed of their animals is already manifest. There was a large attendance of agriculturists from all parts of Cleveland, and the Show ground and its approaches presented a busy scene during the whole of the afternoon. Prior to the exhibition, a meeting of the members of the council was held, and it was decided to hold the annual Show at Middlesbrough on the 24th of July. The Show of thoroughbred and draught horses proved in most respects a success. There was a slight falling off in the entries compared with last year—nine as against thirteen in thoroughbreds, and eight as against ten in the draught class, appearing on the catalogue. Two prizes were offered—viz., £100 for the best thoroughbred, and £50 for the best draught horse; and in the first class a splendid chestnut mare, named the Muleteer the property of Mr. N. R. Fleming, of Normanby Hall, near Middlesbrough, was awarded the prize. The horse was bought by Mr. Fleming at Tattersall's for 230 guineas, and has never been shown before. Beyond having made a good appearance as a hunter, chiefly with the Cleveland hounds, it is a comparatively unknown animal, and the fact of its defeating Klaby, the winner last year, a horse whose splendid quality and fine condition again attracted a considerable amount of attention; the smart Bourbon, the two

grand animals of Messrs. Jackson and Peirson, viz., Boadicea and Lincoln; Old Moldavia, with his long string of manes, and Newland, Lord Derby, and Kelchburne, caused considerable surprise. The winner, however, though badly shown, was admittedly a grand animal, with good points all over, and a capital goer. In the class for draught horses the prize was awarded to the Clydesdale Champion, the property of Mr. W. Simpkin, of Burton Agnes, Yorkshire. This animal took the prize at Guisborough last year, but forfeited in consequence of his not fulfilling the conditions of the competition, viz., to travel the Cleveland district. Amongst other prize-worthy animals shown were Messrs. Jackson and Peirson's Kingsman of Great Ayton, Young Topman, Young Blyth, Sonter Johnnie, Young Conqueror, and Crown Prince. The judges were Mr. J. B. Booth, Killerby Hall, Catterick; Mr. Darrell, West Ayton, and Mr. A. L. Maynard, Newton Hall, Durham. The stewards were Messrs. J. W. Clarke, J. Nightingale, and H. Richardson, and the arrangements gave every satisfaction.—*Leeds Mercury*.

### GUILDFORD.

At the annual meeting of this society, held on Feb. 9, it was resolved to hold a summer show of lean stock. General Marshall was elected president, and Mr. Shotton and Mr. Newitt were respectively re-elected Treasurer and Secretary.

### HEREFORDSHIRE.

The Herefordshire Agricultural Society's annual meeting was held on Feb. 19, Mr. James Rankin in the chair. The secretary (Mr. T. Duckham) read the report, which stated that the exhibition at Kington in August last (the first since the Society had been made migratory and its shows extended over three days) had been successful even beyond the most sanguine anticipation. Kington and neighbourhood had worked most zealously in contributing to this success, and besides offering £232 in local prizes, had introduced sheep-shearing, mowing machine, and sheep dog trials, by which great *ecclat* had been imparted to the gathering. For the first time they had a balance in hand of £73 16s. 6d. The exhibition in every department was a marked success. The following alterations were made in the prize sheet. In classes 9 and 10 pairs of steers instead of singles to be exhibited. The ages of horses to be calculated from the 1st of January. On the third show-day horses not exhibited during the meeting shall be admitted to compete for the jumping prizes on payment of 5s. each. Subscribers of a guinea to the local fund shall enjoy the privilege of members on payment of 10s. 6d. each. Horses shall not be subject to veterinary inspection unless at the request of the judges, and a horse once passed by them shall not be subject to protest.

### MONTGOMERYSHIRE.

The annual meeting was held at Welshpool on Feb. 10, when Mr. R. J. Harrison, of Caerhowel, was chosen President. It was agreed that the next Show should be held at Welshpool.

### NORTH-EAST OF IRELAND.

The first meeting of the committee for the present year was held at the secretary's office, Ulster Buildings, Belfast. Owing to other meetings being held at the same hour, the attendance was unusually small. Mr. John R. Musgrave, J.P., occupied the chair.

The finance, show, premium list, and flax committees for the year now entered upon were elected. Mr. Wm. Hastings, of Victoria Hall, Belfast, was unanimously re-elected as engineer.

The secretary was authorised to apply for the usual site for a show, to make arrangements with the railway and steamship companies of the United Kingdom for the conveyance of live stock and machinery, &c., and to issue an advertisement for the fitting up of the show premises, &c.

### NORTHUMBERLAND.

The annual meeting was held at Alnwick on Feb. 9. After the report had been received, the SECRETARY said the place for holding the show for the present year had been already fixed for Berwick, and the only question remaining was the day on which it should be held. It appeared to him that Friday, the 25th of July, would be the most suitable, looking to the meetings of other societies; and this would give the Northumberland the chance of being for once the first in the field, and perhaps have a better show.

Mr. WILSON suggested that instead of July the 25th, they should adopt Thursday, the 24th—Thursday being a more suitable day.

Mr. WALLACE adopted Mr. Wilson's suggestion, and it was unanimously agreed to.

### SHROPSHIRE AND WEST MIDLAND.

At the adjourned annual meeting of this society, held on Feb. 9 at Shrewsbury, Mr. C. C. Cotes was elected President.

Mr. BARBER introduced the question of amalgamating with the North Shropshire Society.

Mr. T. SOUTHAM said he could not see that retaining the two words "West Midland" should form a barrier to the amalgamation. He knew that there was a better chance now than ever of the two county societies of Worcestershire and Herefordshire amalgamating with them, as they had had very unsuccessful meetings.

Mr. NEVETT said the North Shropshire did not confine themselves to the county, as they went thirteen miles into Staffordshire. He did not know whether the Herefordshire Society was worth joining at present.

Mr. R. J. MORRIS thought it was very desirable that they should make some private inquiries as to whether there was a reasonable chance of amalgamating this society with those of other counties. It was undesirable that they should drop "West Midland" before that.

A long discussion ensued, and eventually the following motion, proposed by Mr. T. SOUTHAM, and seconded by Mr. M. WILLIAMS, was carried: "That this meeting is of opinion that any application from Bridgnorth will receive the favourable consideration of the society, and desires to call a general meeting of the society on this day fortnight to consider and decide the place of meeting for 1890; and also to consider the desirability of amalgamating with the North Shropshire Society."

### WEST GLAMORGAN.

At the annual general meeting of the West Glamorgan Agricultural Society, the report for the year was read and adopted. Mr. H. Gwyn was unanimously elected president for the ensuing year. Mr. P. H. Vivian, M.P., was unanimously elected vice-president.

## Farmers' Clubs.

### BLANDFORD.

This club met at Blandford on Feb. 9, Mr. G. Galpin in the chair. Mr. Charles Rickman read a paper on "geology in its connection with agriculture," illustrating his remarks with the aid of a collection of geological and microscopical specimens and curiosities. The paper was a very interesting one, and was followed by a discussion.

### CARMARTHENSHIRE.

The quarterly meeting was held at Llandillo on Feb. 11, Mr. T. Prouser in the chair. Mr. J. LEWIS read a paper on "The Use and Abuse of Lime," which was followed by a discussion.

### DORCHESTER.

The last monthly meeting was held on Feb. 9 at Dorchester, Mr. H. W. Hawkins in the chair. Mr. Lipscombe, veterinary surgeon, read a paper on "the feeding of horses and cattle in connection with the process of digestion,"

in the course of which he commented on the nutritive value and digestibility of various kinds of food. In the course of the discussion which ensued on the subject, the chairman and Mr. Chapman Saunders bore testimony to the excellence of the paper. Dr. Aldridge said he wished some poor people had as good accommodation as some horses, upon which Mr. Homer remarked that he should be sorry for it to go forth to the public that horses were better looked after than poor people, and Dr. Aldridge said he had no wish for it to be inferred that such was the case. In reply to Mr. Genge the lecturer said too much cake might be given to animals for fattening purposes, which was waste. He advocated giving roots to horses. The chairman said he could understand that a great deal of oilcake and such food was wasted. The lecturer, in acknowledging the vote of thanks which had been passed to him, said horses should be watered before fed; with cattle the reverse.

### IX WORTH.

At a meeting of this club, held on Feb. 8, Mr. T. Thornhill, M.P., in the chair, Mr. B. B. Hunter Rodwell M.P., read an able paper on "Reciprocity," in the course of which he argued that a revival of Protection would be disadvantageous, and that as farmers were certain not to get it for corn and meat they should take care that no duty should be placed on foreign manufactured goods. In the discussion which followed most of the speakers agreed with Mr. Rodwell; but the chairman, who is a sugar-grower, declared in favour of reciprocity.

## Chambers of Agriculture.

### EAST RIDING.

At the last meeting of this Chamber the principal subject discussed was the injury done to the farmers by the excessive preservation of ground game. Several members gave their individual experience, and there was a unanimous expression of opinion that the subject ought to be kept before the Chamber in the hope that eventually the landlords would redress the grievance. A resolution condemnatory of the existing law was passed by the Chamber some years ago, and on the motion of Mr. Riley, of Kiplingcotes, seconded by Mr. Johnson, of Bishop Burton, the members present unanimously resolved, "That in the depressed state of agriculture it is desirable that landlords should reduce the quantity of ground game, seeing that so much injury is done by it." Complaints were also made with reference to the assumption of power by gamekeepers and watchers.

### HEREFORDSHIRE.

At the general meeting, held recently, Mr. M. Biddulph, M.P., was elected President. On the motion of Mr. Duckham the following resolution relating to the highway question was carried:—"That this Chamber petition the two Houses of Parliament to repeal that portion of the Highway Act relating to main roads."

The Law of Distress was next discussed, and the following resolution was agreed to:—"It is the opinion of this Chamber that the present law of distraint requires modification."

In relation to the Coroners' Bill the Chamber agreed:—"That the salaries of coroners be borne by the Consolidated Fund, in lieu of the county and borough rates."

### NORFOLK.

A meeting of this Chamber was held at Norwich on Feb. 15 to discuss the subject of "Corn Averages." Mr. R. T. Gardan, President, took the chair, and introduced the subject.

After a long conversational discussion the following resolutions were unanimously agreed to:—

"That this Chamber is of opinion that the system of taking the corn averages is unsatisfactory and unfair to the producer."

"That this Chamber is in favour of a fixed sum being paid in future to the tithe owner."

"That in the opinion of this Chamber the corn return should be made by the producer rather than by the merchant."

### NOTTS.

A meeting of the Council of this Chamber was held on Feb. 15 at Nottingham, Mr. John Hemslay in the chair.

On the motion of Mr. GODBER, seconded by Mr. H. PARR, Mr. G. Storer, M.P., was unanimously re-elected chairman for the ensuing year.

On the motion of the CHAIRMAN, seconded by Mr. JOHN BRETT, Mr. Edward W. Brown, was unanimously re-elected vice-chairman for the year ensuing.

A report from the Weights and Measures Committee of the Central Chamber was submitted, expressing satisfaction that the new imperial denomination of 100lb. was about to be legalised. The committee in their report also draw attention to the unsatisfactory and misleading character of the mode of determining the official corn averages under the 27th and 28th Victoria, c. 37.

A discussion on the Highways Act took place, and it was resolved:—"That this Council disapproves of most of the provisions of the Highways Act as being calculated to increase the burdens of the ratepayer, and regrets that such a measure was passed until the creation of County Boards."

Mr. BEARDALL then moved, and Mr. BRETT seconded, "That as soon as the new County Government Bill is laid before Parliament a special meeting of the Chamber be called to consider its provisions, and that the attention of members of the Chamber be specially drawn to the importance of the question."

Carried unanimously.

It was further resolved "That Mr. Godber and Mr. J. Walker be requested to attend the meetings of the Central Chamber."

The resolution passed at the late annual meeting at Retford with reference to the establishment of a branch or sub-committee of the Council was discussed, when it was unanimously agreed to approve that course, the Secretary to arrange with the gentlemen in the north of the county as to the *modus operandi*.

### WISBECH.

At the last general meeting of this Chamber Mr. Shelford read a paper on "Road Repairs," which was followed by a discussion, but no resolution was passed.

**RABBIT TRAPS.**—A great many owners of estates are quite unaware of the atrocious cruelty they inflict by permitting their keepers to put down traps for rabbits and hares, or by failing to take care that traps are not put down. Anyone who has seen and heard an old Jack hare, just caught in one of these abominable contrivances, must be hard-hearted indeed if he does not strenuously do all in his power to abolish traps. There is nothing I like better than bowling over a hare, and noticing how, with the impetus of his speed, he turns two or three somersaults before he lies motionless. He is good to eat and must take his chance; but give him a run for his life and do not let him suffer agonies for hour after hour through the long night, with the cruel teeth of a steel strap biting into his bones. It is not as if there was no other way of thinning off hares and rabbits. If you don't care about pottering after them yourself, and have no friends glad of such humble sport, your keeper has. A sight I saw last week completely sickened me, and I plead very earnestly on behalf of Jack and his humble cousins the rabbits.—*Sporting and Dramatic News*.

**SCOTCH "WUT."**—The Scotch colony established at Wimbledon have been enjoying their favourite game of curling during the recent frost, an excellent rink on the most approved principles having been established in anticipation of it. A keen curler and true son of Scotia let off rather a good specimen of "wut" the other day on his losing the game, owing to the bad play of his partner, who happened on this occasion to be a Sassenach. Turning on him with a sardonic grin, the Scotchman remarked, "Eh, man, you'll ne'er mak' a curler in this world, and you'll ne'er see ice in the next."—*World*.

# Agricultural Societies.

## ROYAL.

Monthly Council, Wednesday, February 5th, 1879.  
 Present—Colonel Kingscote, C.B., M.P., Ex-President, in the chair; Earl Cathcart, General Viscount Bridport, Lord Chesam, Lord Vernon, Hon. W. Egerton, M.P., Sir A. K. Macdonald, Bart., Sir M. White Ridley, Bart., M.P., Sir W. Earle Welby-Gregory, Bart., M.P., Sir B. T. Brandreth Gibbs, Mr. Amos, Mr. Arkwright, Mr. Aveling, Mr. Aylmer, Mr. Cantrell, Mr. Chandos-Pole-Gell, Mr. Davies, Mr. Dent, Mr. Druce, Mr. Frankish, Mr. Hemaley, Mr. C. Howard, Mr. Bowen Jones, Mr. K. Leeds, Mr. D. McIntosh, Mr. Martin, Mr. Pain, Mr. Randall, Mr. Ransome, Mr. Rawlence, Mr. R. Russell, Mr. Sanday, Mr. Sheraton, Mr. Shuttleworth, Mr. Stratton, Lieut.-Col. Turbervill, Mr. Jabez Turner, Mr. Wells, Mr. Jacob Wilson, Mr. Wise, Professor Symonds, and Dr. Voelcker.

The following new members were elected :—

Adams, George J., of South Mall, Cork.  
 Ashburner, Robert, of Gleaston Park, Ulverston.  
 Aveling, Thomas Lake, of Rochester.  
 Bagley, Sir Richard, of Mapletrean, Edenbridge.  
 Ball, Henry, of Cross Fields, Stafford.  
 Beldam, Richard, of Witchford, Isle of Ely.  
 Bell, Henry, of 8, Market Buildings, Charterhouse Street, E.C.  
 Bell, James, of 170, Argyll Street, Glasgow.  
 Bennett, J. Powell, of Phoebe, Ross, Herefordshire.  
 Blakesay, Frank, of the Lodge, Chaddesley Corbett, Kidderminster.  
 Booth, Samuel Barker, of Effingham Lodge, Bickley, Kent.  
 Brown, John W. M., of Imere Farm, Snettisham, Lynn.  
 Burgherah, Lord, of Apethorpe Hall, Wansford.  
 Burnett, James, of Sherral Park, Tamworth.  
 Challinor, W., of Pickwood, Leek.  
 Clayden, Henry, of Great Ilford, Essex.  
 Coates, Samuel Baker, of Stanton Drew, Bristol.  
 Colman, Jeremiah, of Carshalton Park, Surrey.  
 Corbett, C. Holland, of Admington Hall, Shipston-on-Stour.  
 Coulton, Edward Foster, of Bellaport, Market Drayton.  
 Crane, John, of Benhall, Shrewsbury.  
 Davison, John, jun., of Frittington, Morpeth.  
 Evington, Roger, of Victoria Steam Mills, Sunderland.  
 Ferguson, Lieut. Col. George A., of Pitfour, Mintlaws, Aberdeen.  
 Fitt, W. E., of the Hermitage, Weeke, Winchester.  
 Foulkes, Septimus Gifford, of Hastoe House, Tring.  
 Fergus, John Joseph, of Brandon House, West Carnforth.  
 Gibbons, Sills Clifford, of Great Walstead, Lindfield.  
 Gooderham, George, of Monewden, Wickham Market.  
 Grant, William J., of Hope End, Ledbury.  
 Gunter, Richard, of Pearcelands, West Hoathly, East Grinstead.  
 Hiscock, Alfred, of West Stour, Gillingham.  
 Hodson, Henry, of Edlestone Farm, Nantwich.  
 Hopkins, George Ore, of Darlington, Prees, Salop.  
 Hughes, H. G. S., of Offley Place, Luton.  
 Hyet, Francis Adams, of Panawick House, Stroud, Gloucestershire.  
 Irving, William J., of Palling Place, Old Windsor.  
 Jones, Frank N. T., of Ambleside.  
 Keovil, W. Charles, of Telford Magna, Salisbury.  
 Leigh, Captain Egerton, of The West Hall, High Leigh, Kestford.  
 Machin, Richard, of Shewkirk Farm, Toekwith, Green Hamerton, York.  
 Moir, James Gordon, of the Manor House, Colley, Reigate.  
 Mosser, Henry Richard, of Heworth Grange, York.  
 Moul, John, of 40, Mooley Street, Newcastle-on-Tyne.  
 Mulder, Dr. Louis, of Mazonstraat, 7, The Hague, Holland.  
 Nichol, Rev. J. G. S., of Litchfield Rectory, Mickledever.  
 Nicholls, Rev. Henry, M.A., of Hawknest Lodge, Billinghurst.

Page, Martain Fountain, of Blackenay, East Dereham.  
 Pawsey, Arthur, of Sandwell House, Lewisham Road, S.E.  
 Peel, Rev. Herbert E., of Abbot's Hill, Hemel Hempstead.  
 Pope, Frank E., of Great Toller, Dorchester.  
 Roberts, Harry, of Caswell, Witney.  
 Rose, Miss, of Mullaghmore, Monaghan, Ireland.  
 Silcock, Edward C., of Wood House, Chettisham, Ely.  
 Silver, Stephen W., of The Berhams, Latcombe Regis, Wantage.  
 Smith, David, of Parham High House, Wickham Market.  
 Smith, Thomas Hostin, of Atherston-on-Stour, Stratford-on-Avon.  
 Streeter, Edwin W., of 18, New Bond Street, W.  
 Tearne, Richard T. P., of Halton Park Farm, Worcester.  
 Trig, Henry, of Bury Lodge, Stansted, Mountfitchet, Essex.  
 Underwood, Michael, of Hornhill, Rudgwick, Horsham.  
 Vickress, Thomas A., of Hill, Sliafold, Horsham.  
 Vincent, William, of Arborfield-cum-Newland, Reading.  
 Waite, Richard, of Driffeld, Derby.  
 Warburton, George Egerton, of Harley Hall, Northwich.  
 Webber, John, of 340, Camden Road, N.  
 Wheeler, William, of Long Compton, Thipston-on-Stour.  
 Wickham, Benjamin, of Goudhurst, Kent.  
 Wilde, Spencer, C., of Cheam House, Cheam, Surrey.  
 Woodward, Robert, of Wetheringsett Lodge, Stonham.

## FINANCES.

Col. KINGSOTE, C.B., M.P. (Chairman), presented the report, from which it appeared that the Secretary's receipts during the past two months had been examined by the Committee, and by Messrs. Quilter, Ball, and Co., the Society's accountants, and were found correct. The balance in the hands of the bankers on Jan. 31st was £1,225 16s. 7d. The balance-sheet for the quarter ended December 31, 1878, and the statement of subscriptions and arrears were laid upon the table, the amount of arrears then due being £839. The names of 96 members who, during the past year, had given notice of withdrawal were ordered to be struck off the books.

The report was adopted.

## JOURNAL.

Mr. DENT reported that he had been elected Chairman, and that the Committee recommended that 8,000 copies of the *Journal* for the current year be published; also that the publications of the Society be exchanged with those of the Meteorological Society. The judges of sewage farms had met, and arranged to make their first inspection during the present month, weather permitting.

This report was adopted.

## METROPOLITAN EXHIBITION.

Colonel KINGSOTE (Chairman) reported that the Committee recommended the acceptance of additional offers of champion prizes for the best male and the best female exhibited of the following breeds, viz:—Norfolk and Suffolk Polled Cattle, Clydesdale horses and English Cart-horses. The Committee had received communications in reference to a proposal to form a Kilburn local committee to co-operate with the Council, which they thought would be exceedingly useful. A letter from the Secretary of the Farmers' Club, asking for permission for their members to use the Society's members' club in the Exhibition, had been considered by the Committee, and they recommended that this request be agreed to. The Committee recommended that application be made to the Privy Council for permission to use, as a quarantine station, space at Portland, which has been offered by the Great Western Railway Company. They also recommended that the printing of the awards of prizes be executed by the Society in the Exhibition grounds; and that all doubtful requests made by exhibitors be left to the discretion of the Steward of General Arrangements (Mr. Jacob Wilson), Sir Brandreth Gibbs, and the Secretary.



This report was adopted; and, in reply to Mr. Dent, Mr. Jacob Wilson explained the proposed arrangements for the supply of refreshments in the Exhibition ground.

## VETERINARY.

The Hon. W. Egerton, M.P., reported that he had been elected Chairman of the Committee for 1879. A letter had been received from the Secretary of the Royal Veterinary College, stating that the Governor complied with the wishes of the Council of the Royal Agricultural Society to obtain the services of the Inspector of the College for the members of the Society during the present year, and asking whether the list of charges would be as laid down in an accompanying scale; and also what would be the rate of payment for special reports or investigations of outbreaks of disease. The Committee recommended that the proposal of the Governors be accepted, and that the charges to members in future be as follows:—

Keep an ox per week...	10s. 6d.
" a sheep .....	3s. 6d.
" a pig .....	3s. 6d.
Personal consultation...	10s. 6d.
" consultation by letter .....	10s. 6d.
Post-mortem examination and report thereon .....	21s. 0d.
Visits in cases of serious or extensive outbreak of disease, exclusive of personal and travelling expenses, per diem .....	42s. 0d.

It was further recommended that special reports or investigations should be paid for according to the nature and importance of the investigation, or according to the scale of charges paid for an article in the *Journal*. With regard to chemical analyses, the payment should be made according to the scale applicable to subscribers to the College. Since the last meeting of the Committee, Professor Axe had reported on an outbreak of scab in sheep, and a case of lead poisoning in cattle; and the Committee recommended that the report in the latter case be published in the agricultural newspapers, viz:—

Royal Veterinary College, Jan. 13th, 1879.

DEAR SIR,—I beg to inform you that I visited Hobb Hill Farm on the 7th inst., and inquired into the circumstances attending an outbreak of disease in a herd of beasts the property of Mr. Handley.

I have to report that the disease first appeared on the 1st of January, and at the time of my visit six cows had died, and several others were seriously ill. Messrs. Flower of Derby, and Poyser of Melbourne, veterinary surgeons, had been consulted by Mr. Handley, and they were of opinion that the malady was due to poisoning by sulphuric and prussic acids.

At the time of the outbreak of the disorder the cows were receiving as food, grains, Indian meal, and hay. The grains were stale, having been collected in the summer. With a view to preserving them, they were covered over with soda and earth which had been removed from the side of the road adjoining Mr. Handley's farm. I had an opportunity of examining a portion of grains and meal on which the cattle were last fed previously to the outbreak, and in it was found a considerable quantity of lead slag in a state of fine division. Similar matter was also found in large quantities in the stomachs of two cows of which I made a post-mortem inspection. As the roads in lead-mining districts are frequently repaired with lead-slag, the soda and earth referred to may be regarded with suspicion of containing the poison. The symptoms exhibited by the animals during life were strikingly illustrative of lead poisoning, and the *post-mortem* lessons likewise point to the same conclusion. Regarding the disease as the result of lead poisoning, I consulted with Mr. Poyser, who was in attendance, and suggested the course of treatment to be pursued. This morning I have received a letter from Mr. Wood of Wirksworth Hill, informing me that no more deaths have occurred. The stomach of one of the cows is now being analysed, and the result will no doubt be made known to you by Professor Tuson when the analysis is completed. I am, yours faithfully,

J. WORTLEY AXE, Professor.

Chemical Laboratory, Royal Veterinary College,  
Camden Town, N.W., February 3rd, 1879.

SIR,—In reference to the suspected case of poisoning sent through you from J. B. Wood, Esq., to this Institution for investigation, I beg to report as follows:—

On the 12th ulto. Professor Axe handed to me a basket, in which I found six parcels and part of a linseed cake. The parcels were respectively labelled:—

"A.—Sample of Indian meal and grains as used before disease broke out, but washed."

"B.—Sample of earth similar to that used for covering the grains; residue of  $\frac{1}{2}$  bushel after repeated washing."

"C.—Sample of Indian meal after repeated washing, that sent being residue of about  $\frac{1}{2}$  bushel."

"D.—Sample of grains after repeated washing of a bucketful."

"E.—Sample of the heap of Indian meal and grains used just before disease appeared, after washing; residue of one cow's feed, i.e., about a bucketful."

"F.—Sample of earth got from same place as that used for covering grains, but washed."

On the 21st ulto. Professor Simonds handed to me four stomachs of a cow.

The materials contained in each of the parcels and the cows' stomachs were separately submitted to chemical analysis, when I detected a considerable quantity of lead in the parcel marked "E," but this metal could not be discovered in either of the other parcels.

Large quantities of lead were likewise found by analysis in the cow's stomachs; in fact, fragments of the supposed poison were picked out of the cells of the reticulum (second stomach). When these fragments, as well as other of similar appearance detected in parcel "E," were analysed, they were in both instances found to consist of galena, which is chemically a native sulphide of lead.

The sample of linseed cake was not examined, as I thought that in all probability the results of its analysis would not throw any light on the cause of the death of Mr. Wood's animals.—I am, sir, your obedient servant,

RICHARD V. TUSON, F.I.C., F.C.S.,  
Professor of Chemistry and Toxicology in the  
Royal Veterinary College.

To the Secretary Royal Agricultural Society,  
Hanover Square.

The report of the examiners appointed to test the qualifications of the students competing for the Society's veterinary medals and prizes had been received, and the Committee recommended that the Council of the Royal College of Veterinary Surgeons be asked to draw up a modified scheme for the consideration of the Council of the Society at their next meeting.

The Committee also recommended that a communication be made from this Council to the Privy Council, urging upon the Government the importance of immediately placing the United States of America under the provisions of the Act which provides for the slaughter of foreign animals at the place of landing.

The Hon. W. EGERTON added, with reference to the last paragraph of the Committee's report, that the evidence before the public had led the Committee to recommend that the United States should be placed under the provisions of the Act of 1878 relating to slaughter at the port of landing. It was perfectly true that in the vessel which brought over the animals suffering from pleuro-pneumonia there were Canadian animals, but it was believed that in future Canadian animals would be shipped from ports within the Dominion, probably Halifax, instead of Portland; and the Committee had therefore not included Canada in their recommendation.

MR. DENT said that he would not formally move the rejection of the last clause of the report, but would merely express his regret that it was thought advisable to make the proposed representation to the Privy Council. He foresaw that if those recommendations were carried out it must end in all animals being slaughtered at the port of debarkation. But at the same time he would like to

register his protest and throw out one word of warning. If trade revived, as he hoped and believed it would, the restrictions on the trade in meat would be so great that he was afraid it would almost be at a famine price, and that an outcry would be raised throughout the country, which would result in the Act being repealed. At this moment there was a decided revival of trade in America, and that revival was mainly owing to the two successful seasons in agriculture. A revival of trade in America always signalled a similar revival of trade in England, and he thought they should very carefully guard against doing anything which would tend to check it. The agriculturists of America were very large consumers of manufactured articles, and the same remark applied to English agriculturists. He did not see how it was possible to draw any line between the United States and Canada, and he should have been glad if the Veterinary Committee had seen it right to leave the matter entirely in the hands of the Privy Council. His own belief was that the restrictions imposed prior to the passing of the Animals Diseases Act were quite sufficient to keep disease out of the country. We were no more free from disease now than we were before the new regulations came in force.

Mr. JACOB WILSON sincerely hoped that the report presented by the Veterinary Committee would be adopted in its entirety, especially as it included their recommendation with reference to the outbreak of disease at Liverpool. He could assure the Council that there was a very strong feeling of alarm throughout the country at this outbreak; and considering that the farmers of England were now subject to very great restrictions, he thought it was the duty of the Council, as representing the agricultural interest of the country, to express their views to the Privy Council. It was quite possible that the Privy Council had already initiated the action suggested by the Committee, and in that case it would be gratifying to the Lord President to know that he was backed by the agricultural opinion of the country. If, on the other hand, the Privy Council were in a state of doubt as to what ought to be done under the circumstances, the opinion of the Royal Agricultural Society might be of value in aiding them to come to a decision. Therefore, on whatever grounds the matter was put, it was desirable that some expression of opinion should be made. It had been to secret whatever that pleuro-pneumonia had existed to a considerable extent throughout the United States of America for some years past, and the other countries of Europe were anxiously watching the action which the Government of this country would take in reference to this outbreak. As to the general trade of the country, he did not for a moment believe that it would be interfered with by the proposal of the Committee. The dead meat trade was extending every day, and the live stock trade had also been considerably developed lately. The Veterinary Committee did not propose to interfere with either trade, but suggested that the live animals imported should be slaughtered at the place of landing. He thought it an exceedingly fortunate thing that this outbreak of disease had taken place before further arrangements had been made for the greater extension of the traffic in America in live cattle. He hoped that the Council would speak with a measured voice, and would show the farmers of the country that their interests were being upheld by the Royal Agricultural Society of England.

Mr. BOWEN JONES thought it would be interesting to have a little additional information in reference to the outbreak of disease at Liverpool, and, with the permission of the Council, he should like to ask the chairman of the Veterinary Committee if a detailed account of the outbreak had been placed before them. For instance, he would like to ask if the animals were moved from the quay by order of the Privy Council, and also whether the same

quay was used for the reception and landing of other animals, and also of the Irish stock coming to England, as, if so, it appeared to him that a large amount of danger must be thereby incurred.

The Hon. W. EGERTON replied that the animals suffering from pleuro-pneumonia came in a mixed cargo of American and Canadian animals, and, although the latter were recognised by the Canadian dealers themselves, the Inspector said he could not distinguish them from the American cattle. With regard to the slaughter of the animals, there was no provision at Liverpool or Birkenhead for their slaughter on the quay. At present all the foreign animals were landed together, as he understood, but the Irish cattle were received at a different landing-place.

Mr. JACOB WILSON added, that the animals actually diseased were not moved, but killed on the spot; but the animals in contact were moved and killed in slaughter-houses in the town.

Mr. BOWEN JONES looked upon the outbreak as a matter of the greatest importance to agriculturists throughout England. With regard to the recommendation made by the Committee, as far as it went, he entirely sympathised with them, but it was a question in his mind whether the Committee had gone far enough, for he thought it would only have been rational if they had included the Dominion of Canada as well as the United States. He added that they must continually urge on the Privy Council to carry out in its true spirit, and to the letter, the Act passed last session. This Act he regarded as a compromise to please the masses in the large towns, who were uneducated upon the subject.

Mr. T. AVELING was adverse to the proposed communication being sent to the Privy Council. He thought that, on the one hand, the Council had done enough in the matter of legislation, while, on the other, they were doing more than enough to encourage the importation of foreign animals.

Colonel KINGSCOTE most thoroughly agreed with the recommendation of the Veterinary Committee, and would be extremely sorry if the Council did not adopt it. The present outbreak of disease was a danger that had been anticipated for some time. There was an honorary member of the Society in the room—Mr. Fleming—who had studied the question very deeply. Mr. Fleming pointed out to him some months ago that this disease of pleuro-pneumonia had been for years past raging in America, and the great danger we should sustain in allowing animals to come into this country without being slaughtered at the port of landing. The Act of Parliament declared that when there is disease in any country, that country should be scheduled, and as they were naturally alarmed by this outbreak of pleuro-pneumonia, they asked the Government to prevent, not American meat, but this disease from coming in.

The report was then adopted.

#### CHEMICAL.

Mr. WELLS reported that he had been elected Chairman of the Committee for the current year. Mr. Christopher, the architect, had explained to the Committee the present position of the work of fitting up the new laboratory. The Committee recommended, in connection with the Woburn experiments, that for the year commencing March 25th, 1878, to the same date 1880, Dr. Voelcker be paid the sum of £50, in addition to his travelling expenses, together with half the fees for analyses made of manures and feeding stuffs used on Crawley Farm; that the duties of the Society's chemist, with reference to the Woburn experiments, be those defined in the memorandum of April, 1878, subject to

any modifications made subsequently; that Dr. Voelcker have the appointment of the assistants and servants in the laboratory, and that a sum not exceeding £860 (as already agreed to by the Council) be placed at his disposal for the payment of salaries and wages, and that Dr. Voelcker be authorised to purchase, on behalf of the Society, the apparatus and other articles necessary for the equipment of the laboratory. The Committee had approved an agreement with Dr. Voelcker, embodying the foregoing recommendations, and they now recommended that the Secretary be instructed to complete the agreement. They further recommended that notices be sent to members of the Society that the laboratory will be open on the 1st of March, and that the notices be accompanied by a statement of members' privileges, and by a copy of the recommendations made in 1876 by order of the Council to intending purchasers of manures and feeding stuffs.

This report was adopted; and on the motion of Mr. RANDALL, it was agreed that the statement of members' chemical privileges should be accompanied by a statement of the other privileges of membership, and a plan of the London showyard.

#### SHOWYARD CONTRACTS.

Mr. JACOB WILSON reported that he had been elected Chairman, and that the Committee made the following recommendations:—That a payment of £1,000 be made on account for drainage, ballast-burning, levelling, &c., in the showyard at Kilburn, the draining of which would be finished in the course of the current month. That a clock-tower be erected above the entrance to the members' club, and that sleeping berths for the use of the men be provided free of charge in the foreign department. The Committee also reported that they had approved the various plans, subject to any alteration by the Chairman; and that the Secretary had laid before them Mr. Penny's account of expenditure for showyard works for the last two months, the balance in hand on February 1st being £1,062 10s. 5d.

Mr. WILSON having explained that further arrangements for sleeping accommodation would be reported upon at the next Council meeting, the report of the Committee was adopted.

#### IMPLEMENTS.

Mr. HELMSLEY reported that he had been elected Chairman of the Committee, and presented their recommendation that the waggons in competition for the gold medal offered by the Mansion House Committee be exhibited in the showyard; that the trials of these waggons be completed by the first day of the Exhibition; and that ice be renewed, if required, at certain stations and at certain times during the six days' trial. The Secretary had been instructed to communicate with the different railway companies to make arrangements for the trial. Many inquiries having been made as to the details in reference to the plans of farm buildings in competition for the prizes offered, the Committee had decided to leave the same to the discretion of the competitors, and to issue no other conditions than those already laid down. The report was adopted.

#### SELECTION.

Earl CATHCART reported that he had been elected Chairman, and presented the Committee's recommendation in reference to the appointment of stewards of stock, implements, butter, cheese, and provisions, for the metropolitan exhibition. This report was adopted.

On the motion of Earl CATHCART, seconded by General Viscount BRIDPORT, Mr. Robert Neville, of Butley Court, Glastonbury, was elected a member of Council, to fill the vacancy caused by the election of Mr. Lawes as Vice-President.

On the motion of Earl CATHCART, seconded by Mr. DENT, Mr. Samuel P. Foster, of Killhow, Carlisle, was elected a member of Council, to fill the vacancy caused by the death of Mr. T. C. Booth of Warlaby.

On the motion of Mr. RANDALL, seconded by General Viscount BRIDPORT, Mr. Davies's name was added to the Veterinary, Stock Prizes, and Metropolitan Exhibition Committees.

The Committee of Inspection presented their report on the proposed site and other accommodation offered by the authorities of Carlisle for the country meeting of 1880; and the Secretary was instructed to request the attendance of a small deputation of the authorities at the next Council meeting, and in the meantime to prepare a draft of an agreement for execution if necessary.

In reference to the suggestion made by Mr. BOWICK at the general meeting in December,

Mr. DENT remarked that the object of the Colportage Association in Bedfordshire was no doubt a very good one, but the same might be said of cocoa and coffee-houses, and other institutions. If the Council were to appoint a commission to inquire into all these things, it would be impossible to find the requisite money. He moved, "That in the opinion of this Council it is not desirable at present to make any such inquiry as Mr. Bowick has suggested."

Sir W. E. WELBY GREGORY seconded the motion, adding that, according to his experience, the success of such Associations depended on personal supervision and care.

The motion was adopted.

As regards Mr. THOMAS BELL's suggestion, made at the General Meeting in December,

Mr. BOWEN JONES observed that probably some advantage would be derived by small farmers by these examinations now being instituted by the Science and Art Department; and as the best way of dealing with the question, he would propose, "That Mr. Bell's suggestion be referred to the Education Committee." Under the scheme of the Science and Art Department certain persons—such as those who had taken a degree at any University in the United Kingdom—were qualified to teach agriculture, and he thought, if the Council considered the matter, they might be disposed to recommend that gentlemen who had obtained either the diplomas of the Society or of the Agricultural College at Cirencester should be placed on the same footing. If the scheme were carried out extensively, many elementary teachers would be found, whose technical knowledge qualified them to teach agriculture.

Mr. JABEZ TURNER seconded the motion, remarking that anything which could bring increased education before the sons of farmers was a matter deserving the greatest consideration at the hands of the Council.

Mr. WELLS also spoke in favour of referring the question to the Education Committee, and

The resolution was then adopted.

A letter was read from Mr. Milward, acknowledging a letter from H.R.H. the President, on the occasion of his (Mr. Milward's) retirement from the Council.

A letter was read from the Essex Agricultural Society expressing their intention to hold their annual show as usual.

A letter was read from Mr. Lawes, accepting office as Vice-President of the Society.

An application from Mr. Stanford for the award of the third prize in the class for Agricultural Horses at the Taunton Show was refused.

Letters were read from the Science and Art Department, acceding to the Society's application for the loan of

a collection of specimens illustrative of food, and accepting the offer of an old leaden cistern, dated 1732, in the possession of the Society.

The CHAIRMAN announced that since the last Council meeting a portrait of H.R.H. had been presented to the Society by the Prince of Wales.

### HIGHLAND AND AGRICULTURAL.

The monthly meeting of the directors of this Society was held on Feb. 5 in Edinburgh—Mr. Gillon, of Wallhouse, in the chair. Remits to committees were made in connection with the following subjects:—"Circuit of Annual Shows," "General Meetings at Annual Shows," on "Chemical Analysis," and on the "Prize Essay System." On an application by Colonel Innes of Learney, the board agreed to give a donation of £25 for this year in aid of the School of Chemistry and Agriculture established in Aberdeen. The Secretary stated that the author of the report on ring-shaking in trees, for which the premium of the medium gold medal or five sovereigns was awarded at the general meeting, was Mr. Thomas Wilkie, forester Ardinglass, Inverary. It was resolved that a family prize for Shorthorns should be given at the general show at Kelso in 1890—each entry to consist of a cow and two of her descendants, male or female. The Secretary stated that (in consequence, he believed, of a notice in the *Gazette* made by a member of the Society disclaiming membership) he had received some applications inquiring if the holding of bank stock by the Society involved the members in personal liability. The directors instructed the Secretary to insert in the report of this day's meeting the following statement:—

That the Society is incorporated by Royal charter, and that the only obligation thereby imposed on members is payment of their subscription; that it had been announced from the bench of the Court of Session that "a corporation being a separate person, has its own estate and its own liabilities, and the corporators (members) are not liable for the corporation, but only to the corporation within the limit of the obligation they had undertaken to subscribe to the corporate funds;" members, therefore, are liable for nothing beyond their subscriptions.

A copy of the agreement between the Society and the Royal College of Veterinary Surgeons, referred to at the general meeting on the 15th ult., was engrossed in the proceedings. The agreement has been framed with the view to the admission of the holders of the Highland Society's veterinary certificate as members of the College, and also for the purpose of terminating the examinations in veterinary surgery heretofore held by the Society.

### BRITISH DAIRY FARMERS' ASSOCIATION.

A meeting of the Committee of this Association took place at 446, Strand, on Tuesday, the 4th ult., T. Nuttall, Esq., of Beeby, Leicester, in the chair.

The following new members were elected:—

The Earl of Huntingdon, Clashmore House, Waterford.  
Mr. Charles Howard, Biddenham, Bedford.  
Mr. F. Street, Somersham Park, Huntingdon.  
Mr. W. A. Dolby, Cambridge Villa, New Barnet.

The HON. SECRETARY read the names of gentlemen who had been invited and had consented to act, if elected on the future Council. A list of fifty-four was prepared, containing all those proposed, a copy of which will be sent to each member of the Association, who will be requested to affix his signature to thirty-six.

It was decided, however, that before the actual election should commence all outstanding matters of a financial character should be disposed of, and all debts due to the Society collected, in order that the new executive body

may proceed, as soon as possible after its formation, with the practical work of the Association in the dairy interest, without being embarrassed by unsettled affairs of the past management.

The HON. SEC. reported that a considerable number of subscriptions for 1878 and a few for 1877 were still in arrear, and instructions were accordingly given to address circulars to all members who had not paid, requesting them to do so as soon as possible.

The Journal Committee reported that estimates had been received for the printing of the *Journal* for 1878, the publication of which had been delayed in order to include with the original papers contributed by members a reprint of the catalogue of the late Dairy Show, thoroughly revised and corrected, with marginal notes of the awards. It was resolved to fix the price of the *Journal* at half-a-crown.

The question of sending a representative to the Berlin Dairy Show was again brought forward, and discussed, but finally abandoned. Arrangements were, however, made to secure a special detailed report for publication in the *Journal* for 1879.

Professor SHELTON submitted for the consideration of the Committee an arrangement he was able to make with some manufacturers of dairy utensils in the United States, whereby specimens of the newest and most approved implements in use in that country would be sent over for exhibition at the London Dairy Show, to be the property of the Association on the payment of carriage from America. It being considered by the Committee that the exhibition of such utensils would not only be interesting to the public, but have a tendency to forward the objects of the Society, it was unanimously resolved to adopt the suggestion.

### ENGLISH CART-HORSE.

The Council meeting of this Society was held on Feb. 4, in a room of the Society of Arts, Adelphi, London, the Hon. E. Coke in the chair.

Forty-two new members were elected, His Royal Highness the Prince of Wales becoming both a life member and patron of the Society.

It has been arranged that

The following four champion cups, valued at £25 each, shall be competed for at the Royal Agricultural Society's Show, to be held in London in July next, and shall be awarded to agricultural horses not eligible to compete in the Clydesdale or Suffolk classes:—

No. 1. Presented by the Earl of Ellesmere, as President of the English Cart-horse Society, for the best Stallion three years old and upwards in Classes 1 and 2.

No. 2. Presented by the Council of the English Cart-horse Society for the best two-year-old or yearling Stallion in Classes 3 and 4.

No. 3. Presented by the Council of the English Cart-horse Society for the best Mare or Filly (not Clydesdale or Suffolk), three years old and upwards, in classes 18 and 31.

No. 4. Presented by the Council of the English Cart-horse Society for the best two year old or yearling Filly in classes 24 and 27.

### SHORTHORN.

A meeting of the Council of this Society was held at the Society's Rooms, 12, Hanover Square, on Tuesday the 4th ult. Present—Colonel Kingscote, C.B., M.P., vice-president, in the chair; Mr. Hugh Aylmer, Mr. H. W. Beauford, Mr. John B. Booth, Mr. H. Chandos-Pole-Gell, Mr. John Harward, Mr. C. Howard, Mr. D. McIntosh, Rev. T. Staniforth, Mr. R. Stratton, and Mr. Jacob Wilson.

The following new members were elected:—  
Barnes, C. A., Solihull, Richmansworth, Herts.

Book, Captain W. E., Manor House, Somersford, Chippenham.  
 Broth, Mrs., Warlaby, Northallerton.  
 Bourke, W. Campbell, Tieslash, Fermor, Co. Cork.  
 Cantlie, C. A., Keithmore, Dufftown, N.B.  
 Coleman, John, Carnaby, Hull.  
 Hampson, Mrs. S. W., Ullenwood, Cheltenham.  
 Lees, Harold, Pickhill Hall, Wrexham.  
 Miles, Sir Philip, Bart., Leigh Court, Bristol.  
 Moir, Captain J. G., The Manor House, Colley, Brigate.  
 Newton, H. V., Polstrong, Camborne, Cornwall.  
 Owen, F. B., Deesfield, Ellesmere, Salop.  
 Robson, John, jun., Birness, Ottburn, Northumberland.  
 Russell, Nathaniel, Northallerton, Yorkshire.  
 Statham, Henry, Thurnham, Maidstone, Kent.  
 Taylor, George, Stanton Prior, Bristol.  
 Thomson, R., Barabank Farm, Blairdrummond, N.B.  
 Torridge, Francisco, 4, Jeffrey's Square, St. Mary Axe, E.C.  
 Waide, John, Anness, Kirby Moorside, Yorkshire.

#### EDITING COMMITTEE.

COLONEL KINGSCOTE reported that the Committee had examined the pedigrees of several bulls sent for insertion in the forthcoming volume, some of which they had accepted; and they had directed the Secretary to obtain further information with regard to others, previous to their acceptance or otherwise by the Committee.

That the Committee recommended the following new regulation with regard to entries in the Herd Book:—

That in case of a pedigree entered in the Herd Book for the first time, in addition to a certificate from the breeder of the animal, there shall be required a certificate from the breeder of each dam in the pedigree for four generations, setting forth the date of calving, and giving the names of the persons whose hands the dams have passed.

That the Committee also desired to lay before the Council an application from the editor of an agricultural paper, asking for an exchange of the Herd Book with that paper.

This report was adopted; and on the motion of Mr. D. McIntosh, seconded by Mr. C. Howard, it was resolved:—

That a free copy of the future volumes of the Herd Book be sent to the principal agricultural papers for review in exchange for a free copy, sent to the Society, of those papers as published weekly.

A list of the said agricultural papers was thereupon settled by the Council, and the Secretary was directed to forward a copy of this resolution to the editors of the respective papers.

#### GENERAL PURPOSES COMMITTEE.

Mr. D. MCINTOSH reported the accounts for the months of December and January had been examined by Messrs. Quilter, Bull, and Co., and the Committee, and were found to be correct; that the Secretary's petty cash account had been examined and passed, and showed an expenditure of £244s. 11d. during the past two months; that the receipts for the same period had been £1,030 5s. 5d., the balance of the Society's current account at the banker's being £1,058 16s. 11d., and that the sum of £500 (less expenses) had been invested in the 3 per cent. Consols. That the Committee recommended that cheques be drawn for various accounts amounting to £614 8s. 3d.

That the Committee had considered an application from the secretary of the Newcastle Farmers' Club, asking at what price the Society would supply certain volumes of the Herd Book to the Club, and the Committee recommended that the Newcastle Farmers' Club have the privilege of purchasing such volumes at members' rates.

That the Committee wished to lay before the Council, for their consideration, the proposed alterations in the Articles of Association, viz., Articles 8, 9, 10, 11, 12,

and 13, providing for the increase of the number of members of the Council to 33, retiring 11 at a time, and abolishing the office of Honorary Councilmen.

The report was adopted.

The proposed alterations in the Articles of Association having been read and considered, it was resolved that at the next annual general meeting of members they be recommended to the members for adoption, and that due notice of the said alterations be sent to each member of the Society at the proper time.

The next meeting of the Council was fixed for Tuesday, the 4th of March, at 3.30 p.m.

#### SMITHFIELD CLUB.

At a meeting of the Council held at the Agricultural Hall, Tuesday, February 4th, 1879, Col. Kingscote, C.B., M.P., President, in the chair.

The minutes of the last Council meeting were read and confirmed.

The Veterinary Inspector's report on the health of the animals at the last show was read.

Mr. Thomas Brown, of Marham, Downham, Norfolk, and Mr. V. B. Watts, of Melcomb, Dorset, were unanimously elected stewards of live stock for the ensuing three years.

Mr. Joseph Druce, of Eynsham, Oxford, and Mr. Robert Leeds, of Keswick Old Hall, Norwich, were unanimously elected stewards of implements for the present year.

The following reports of the stewards of live stock were read, received, and adopted, viz.:—

A protest was lodged against pen No. 241, on the ground that one of the ewes was under three years old. Having carefully considered the matter, and heard the evidence of both parties, they decided that the protest was not sustained, and therefore the prize as awarded shall be paid to the exhibitor.

A protest was entered against pen No. 363, in Class 70, on account of the age of the pigs not corresponding with the entry. The exhibitor admitted to the stewards that the pigs were wrongly placed through the negligence of his servant; and they were accordingly disqualified. Pen No. 385, in Class 75, was protested against as being of the same litter as No. 349, Class 66, and therefore not qualified to compete in a class for other breeds. The bailiff of the exhibitor admitted that they were all of the same litter. They were, therefore, disqualified; and the stewards recommend that no certificate signed by James Robertson, the bailiff to Lord Radnor, be received for any of the Club's shows for the future, he having certified that the same litter of pigs were of different breeds. The stewards, therefore, recommend that the cup be given to reserve number 382. They have to report that the pen of pigs, No. 376, in Class 72, having been certified by Professor Brown to be of different ages, the breeder has been called upon to prove the correctness of his certificate.

They recommend that the following addition be made to rule No. 16 in the prize sheep:—"If the exhibitor or breeder should fail to do this by the 30th day of January next, after the show the stewards shall report the facts of the case to the next Council meeting, and the Council shall determine whether the exhibitor or breeder, or both, shall be allowed to exhibit in future at the Club's show."

Also, that the following addition be made to rule No. 42 (in regard to protests):—"That any person or persons lodging a protest shall deposit the sum of £5 with the secretary of the Club, and if on investigation the protest is not sustained to the satisfaction of the stewards, the sum thus deposited shall, at the discretion of the Council, be forfeited to the funds of the Club."

With reference to the pen of pigs No. 376, belonging to Mr. Edward Tombs, of Shilton, and bred by Mr. William Tombs, of Langford, and respecting which the Veterinary Professor reported that the denotation indicated that the three pigs were not all of the same litter, the stewards beg to report that the exhibitor and breeder having been called upon to prove the

correctness of their certificates, after personal conference between the stewards and exhibitor, and correspondence with the breeder, the latter wrote the following letter:—

Langford, Dec. 24th, 1878.

SIR,—I must admit that my pigs have been all let run together in yards, having no proper styes, and it may be that the three pigs are not all of the same litter. Having no idea of showing them myself, did not take the precaution to keep them separate, which now I deeply regret.

Yours truly,

(Signed)

W. TOMES.

Under these circumstances the Stewards disqualified the pigs, in accordance with the rules of the Club.

The Stewards consider it highly reprehensible for a breeder to sign his name to a certificate of the correctness of which he is unable even to satisfy himself. The Stewards hope that the addition which they recommend to be made to Rule 16 will enable the Council in future to deal with cases of this description as each may appear to deserve.

It was resolved—That the special rules hitherto in force, preventing animals exhibited at other shows within a month previous to the Smithfield Club's Show, shall not be in operation any longer; but that the following be continued as heretofore:—

3. That the exhibitor shall send with each animal a certificate that it has not been, for fourteen days previous to its leaving home for the Smithfield Club's Show, in contact with any animal suffering from contagious or infectious disease. No animal will be admitted without this certificate.

4. That all animals undergo a veterinary examination previous to being admitted at the doors of the Agricultural Hall; and that suitable covering be constructed over the outer yard to enable this to be properly carried out.

A committee was appointed, consisting of the President, Lord Walsingham, Messrs. Jacob Wilson, Charles Howard, Thomas Brown, Richard Stratton, Walter Farthing, Ingh Aylmer, John Treadwell, Garrett Taylor, Edward Paddison, and Henry Webb, to take evidence, consider, and report on the prize-sheet generally, and especially as to the advisability of any alteration being made for the year 1880, prohibiting animals once shown being again exhibited, also for preventing aged animals competing for the champion plate, and of still further reducing the number of prizes for the older classes of animals.

It was resolved to alter the rule which exempts Scotch animals from having their ages certified so as not to make the exemptions applicable to the Scotch Polled breed. The exemption to be only for Highland Scotch and the Welsh breeds.

It was resolved to add the following words to the division for "Pigs of any other breed"—viz., "No pigs qualified for the preceding classes can be shown in this division."

A suggestion as to judges was referred to the Judges Selection Committee.

Various communications and suggestions were considered, and replies ordered to be given thereto.

The Implement Committee was re-appointed, with the same powers as heretofore.

It was resolved that the arrangements made for some years past with the proprietors of cattle conveyances be so continued, thus leaving it to the exhibitors to make their own arrangements as to the conveyance of their animals to the yard.

It was determined that the application to institute prizes for Guernsey fat cattle cannot be acceded to; also that an application for classes for pigs producing the greatest amount of lean meat cannot be granted.

It was determined to add to the diplomas given to the men who have had the charge and feeding of first-prize animals, a statement of the breed cups or champion cup, as the case may be, in the diplomas issued to the respective winners.

It was determined to add the word "lambs" as well as sheep in the conditions for the breed cups and champion plate (sheep).

The following were duly elected members of the Club:—

Walter Gilbey, of Elsenham Hall, Essex.

S. Field, of Farnfield, Southwell, Notts.

Thomas Purkis Brand, of Foxearth, Essex.

Betts W. Hammond, of Frenze Hall, Diss, Norfolk.

J. S. Stone, of Newport, Mon.

George Garse, of Churchill Heath, Chipping Norton, Oxon.

The best thanks of the meeting were voted to Colonel Kingcote, C.B., M.P., the President, for his able conduct in the chair, and the Right Hon. Lord Walsingham, V.P., for having presided after the President had left.

The meeting then adjourned till the usual meeting in November, unless a Council meeting be called in the meantime by order of the President.

## Farmers' Clubs.

### CENTRAL.

The first meeting of the Farmers' Club in its excellent new quarters, at the Inns of Court Hotel, Holborn, took place last Monday, Feb. 3, the attendance being numerous. For some time before the proceedings commenced many of the members were engaged in inspecting the various rooms, which in all respects appear likely to give general satisfaction, the amount and character of the accommodation, as well as the aspect of the hotel, being all that could be desired. The chairman for the year, Mr. Pickering Phipps, M.P., presided.

The CHAIRMAN said: Gentlemen,—Upon this, the first occasion that I have had the pleasure of presiding as your chairman at a Club discussion, allow me to thank you for the distinguished honour that you have paid me by electing me. Following as I do so many excellent predecessors, I cannot hope to appear very successful, but of this you may rest assured, that I shall do my best to perform the duties which engage my attention (Cheers). I wish I could congratulate my brother farmers upon the advent of better times; but I feel certain that few of you can recollect a period when agriculture was in a state of greater depression than it is at the present moment (Hear, hear). But I hope that the indomitable pluck of the British farmer, which has led him out of many difficulties, will get him out of these. I trust that, having had what may be called an old-fashioned winter and a frost which has done a great deal of good to the land, we shall see them succeeded by a genial spring, and that through the blessing of Providence we shall have larger crops than we have seen for some years. I am sorry to tell you that the gentleman who was to have read the paper this evening, Mr. James Howard, whose kind and genial face we must all miss, has met with a severe accident. He has dislocated and broken his ankle, and is at the present time in bed, at the St. Pancras Hotel; but I am happy to say that he is going on well (cheers), and I hope he will soon be with us again. His nephew, Mr. J. P. Farrar, has undertaken to read the paper, which, if we were to judge from Mr. Howard's ability and experience, is sure to prove interesting (Cheers).

The paper was then read, as follows:—

Four years ago I brought before the Club the sanitary condition of our villages. To-day my subject bears upon their social, moral, and intellectual condition.

The two subjects, although apparently remote, are not altogether dissociated, inasmuch as nothing is more calculated to retard moral progress than the indecent or filthy surroundings. On this point, in a pamphlet upon the Suffolk Village Clubs,

Mr. Robert Johnson justly observes:—"All efforts for the amelioration of the labourer's lot are neutralised if his dwelling does not permit the observance of even the ordinary decencies of life." I am glad to say that through the Rural Sanitary Authorities some progress has been made in the sanitary condition of our villages since the time I have just referred to; but having had experience in the administration of the Sanitary Acts, I would for a moment go out of my way and embrace this opportunity of expressing an opinion that the radical reforms required in a vast number of our villages will never be made until the burden is placed upon the right shoulders, and the necessary rates are payable by the owners of the soil instead of by the occupiers. That the permanent prosperity, or the ultimate decline, of a nation, mainly depends upon whether the people are intelligent, sober, and thrifty, or ignorant, intemperate, and improvident, is a proposition that few in the present day will be found to dispute. The rapid recovery of the French nation from the paralysis consequent upon the gigantic losses sustained through her war with Germany is the most startling of modern instances of the importance to a country of sobriety and thrift amongst its people. Except to the working classes themselves, to no section of the community is their condition and character so important as to the employers of labour. It follows, therefore, that the subject for discussion which I have undertaken to introduce to-day, although it does not, like most subjects brought before you, bear directly upon the practical business of the farm, yet, seeing that it aims at raising the moral tone of our labourers and villagers, it cannot but be regarded as one most fitting to be discussed by the members of the London Farmers' Club. Having devoted some time and thought for two or three years put to the subject, I have arrived at the conclusion that, if the Elementary Education Acts are to exert a permanent and beneficial influence upon our village population, a vigorous and widespread effort must be made to provide for those who have passed through the schools the means and opportunities for rational amusement and instruction; and I am glad to find, judging from the efforts which have been made in various parts of England, that a good many thoughtful people have arrived at the same conclusion. No small amount of the cost of improved education having come out of the pockets of the farmers, to them no less than to the landowners the question whether the fruits of our present rural education are to be thrown away or harvested cannot be one of indifference. That "a little knowledge is a dangerous thing" we have heard from youth up. It is to be hoped that the coming generation of agricultural labourers will in many things prove wiser than the present. That an important section "is being befooled and betrayed" we have upon the authority of their own chosen and able champion, Joseph Arch. From the startling protest issued by him last week it would appear that the wire-pullers of the National Agricultural Labourers' Union for every £10,000 collected and administered, manage to retain no less a sum than £7,000 for themselves and official expenses. Again, it is to be hoped that such folly as has lately been displayed by the Kent and Sussex men will not be repeated in the future. It is really lamentable that so large a number of deserving men should, through ignorance of economical laws of the most elementary kind, have been thus led away. To turn, however, to the more immediate subject of my paper, I would inquire, if the circumstances which surround the population of our villages are surveyed, what is the result? In the majority of cases not a single place of amusement or recreation is to be found into which the young labourer can put his head, except the public-house. Warnings against the danger of frequenting these places and the habits to which the practice leads have not been lacking. From every pulpit in the land the voice of admonition has constantly been heard; from boyhood our rustics have been accustomed to listen to exhortations upon the sin and misery resulting from drunkenness, and to be scolded by well-meaning people upon the folly of spending their evenings at the public-house. To preach morally to others has never, from the days of Noah, been a difficult task, but to realise the difficulties of carrying the virtue into practice it is essential that those who exhort should look into the circumstances of the class or of the individuals addressed. I would not for a moment extenuate the folly of the labourer or say one word which could be regarded by him as furnishing an excuse for spending his time and money at the public-house, but in looking calmly at a question of this kind we are bound in justice to take a man as he is. No matter in what rank of

life he is found, man is the same—a being social by natural instinct, influenced by external surroundings whether they be elevating or demoralising. Much fault has been found with labouring classes upon the score of intemperance, but I am not sure that to a great extent this has not resulted from circumstances over which they have had but little control.

So far as agricultural labourers are concerned, I would ask, is not the old but gradually diminishing practice of giving large quantities of beer to both boys and men during haytime and harvest answerable for some of the unconquerable love of it which so extensively prevails? But, apart from this, we have to take into account what a German philosopher has termed "the play element of human nature." Is it reasonable to suppose that men and lads, especially those in whom the social instinct is highly developed, should be content after the labours of the day to spend their evening hours from nightfall to bedtime in their own homes? Those who think so know little of human nature, and still less of the normal or occasional discomforts of the cottager's own fireside. That so large a proportion of our labourers exercise so much self-denial, and put up, week after week, with their own scanty domestic accommodation rather than join the company in the taproom, redounds greatly to their credit, and has often been to me a subject of surprise and satisfaction. I would, before quitting this part of my subject, say a word or two about publicans and public-houses. I am not one of those who deal out wholesale denunciation of this class or of these places. In my early career I had occasion to visit hundreds of villages in different parts of England upon business, and had, therefore, abundant opportunities of becoming acquainted with the character and views of publicans, with much of the inner life of the houses, also with the conveniences such places afford to the traveller. That they are not all conducted without regard to morality, that very many are in the hands of men of right feeling, I have had ample proof. Frequently have I heard from the lips of publicans that drunken men are the worst enemies of their houses, for they drive away and keep away the better and more constant customers—sober and respectable people. Still the fact remains that, however desirous a publican may be of conducting his house in an orderly and respectable manner, he cannot choose his customers; being a public-house, it is not like a shop, but every passer-by has the right not only to enter, but on certain conditions may remain as long as the house is legally open. A villager, therefore, on going to a public-house is never sure of the company he will meet. The London Farmers' Club has been for some years past, and will be, I hope, for many years to come, a centre which has afforded much social and intellectual enjoyment to its members. Meeting here, as they do, from the various counties of England, and interchanging ideas and opinions upon subjects of common interest, they can to the full extent appreciate the advantages which a club possesses over an inn. It would not assuredly administer to the enjoyment or edification of the persons using these rooms if every passer through London claiming connection with the agricultural interest had the right of entry, and it is to just this difference that the club for a village possesses superior advantages over the public-house. Having taken some trouble to inquire into the working of village clubs, I have been led to the conclusion that neither reading-rooms nor clubs are attractive or successful where exciseable liquors are prohibited. To attempt in this way to allure the labourer from his beer has proved not only abortive but frustrative of the object in view. In any attempts to elevate the labourer his tastes and habits in this and other matters must to a certain extent be considered; and unless our schemes are adapted thereto failure will be the inevitable result. The most successful clubs are those in which, in the words of the late Vicar of Stockcross, "the innocent charms of the beerhouse are found without its contaminating influence and associates." The prohibition of beer is looked upon by the class intended to be benefited in the light of distrust, and many well-meaning promoters of village clubs have found this means of enforcing temperance resented as an affront, distrust on the part of patrons being repaid by distrust. The Hon. and Rev. Orlando Forester, Godling Rectory, Nottingham, in writing of a club established in his own parish remarks: "Some whose opinions I greatly value urged upon me the desirability of constituting the club a place of resort such as is known in large towns as the public-house without the drink. I could not, however, take their view. I am myself a total abstainer, not because I hold that

it is unwise to drink . . . Still it would be foolish to shut one's eyes to the fact that the great majority everywhere is on the side which is opposed to total abstinence, and cannot be brought to view matters in the light taken by total abstinence. So it seemed to be the better way to shape the Club so that it might give opportunities of independence and foster habits of moderation amongst those who were not total abstainers. To have set going an establishment like a temperance hall might have started an institution which would have gathered a few members, but it would have shut out the bulk of the parishioners, compelling those who might be willing to dissociate themselves from the influence of the public-house to continue under that influence, and it would moreover have been a costly failure." About the best sample of village club which has come under my observation is one founded last year by Sir Philip Rose, Bart., at Tyler's Green, Bucks, and from what I had read and heard of it I was induced to pay it a visit last week. Sir Philip has erected the buildings and furnished them with every convenience at his own cost. The *South Bucks Free Press* wrote of it as follows:—"There has risen during the past few months a building that bids fair to exercise a potent influence upon the future history of Tyler's Green and the neighbourhood. In common with most other reflective men, Sir Philip Rose, the High Sheriff of Bucks, has felt a deep interest in what is called, somewhat vaguely, the 'temperance question.' He has not hesitated to express his opinion that the problem is yet unsolved; that the agencies which are at work in the country, good as far as they go, touch but the fringe of the question and stop there, incapable from their own character of penetrating any further. Whether this opinion be the correct one or not, Sir Philip Rose carries it to its logical sequence. He does not doubt the efficacy of the theories of total abstinence and the advocates of legislative enactments without proposing his own solution in place of theirs. His reply is not a simple *non possumus*, but an offering of something which he holds to be better. He says, in effect, that this question of temperance is only one part of a great reform which should aim at a general upraising of the standard of taste among the working classes—a reform which will work by instilling new habits of thought, and will end, not in compelling a man to be a sober and well-conducted citizen, but in first implanting such a desire in his heart and then giving him the opportunity of gratifying it. Above all, a reform from which ostentatious charity and patronage shall be rigidly excluded, and in which the self-respect and intelligence of the working man himself shall be allowed to play their own proper part. The practical outcome of this reasoning is the building we have spoken of. Sir Philip Rose has built and furnished it, and offers it to the Club for a couple of years free of all charges. At the expiration of that time it is anticipated that the Club will have ample ability to run alone, and that its best interest will be consulted by allowing it a wholesome independence. The rules and bye-laws of the newly-formed Club have been registered under the Friendly Societies Act, a step which has been taken for several reasons, one being the consequent necessity of sending an annual return and balance-sheet to the Registrar. They contain explicit information as to its objects and constitution. Rule II. says:—"The objects of this society are to afford to the members the means of social intercourse, mutual helpfulness, mental and moral improvement, industrial welfare, and rational recreation."

In a speech at the opening the founder remarked: "The subject of working men's clubs has become a great question. It lies at the root of what is occupying the attention of every thoughtful mind—how to raise the tone and improve the habits of the working classes, and to wean them from the debasing influences of intemperance. There is, unfortunately, I am afraid, no difference of opinion as to the existence of the evil, or that while intemperance has almost disappeared, or has been very greatly lessened, among the upper and middle classes it is not so among the working classes, but there has been a proportionate increase. The evil is admitted; but the remedies proposed are various. Some think that drunkenness can be abolished by Parliamentary restrictions; other most excellent people devote their lives to a crusade in favour of total abstinence, and, by appeals to the reason, and experience, and better nature of the working man, hope to induce him to exchange his beer for cocoa and coffee. Others suppose that by opening a room and filling it with newspapers and good books the working man can be induced to forsake the taproom

and take to the Institute all at once. But these efforts, however praiseworthy they are, fail. The total abstinence movement effects great benefit, no doubt, in individual cases, but it fails to reach the masses—it cannot effect the habits of a nation. So also with the Institutes, although they may continue to exist, the working man is not found there. I venture to think that all these efforts begin at the wrong end. There are, however, some who take a broader and more practical view of this important question, and think that the true solution of the problem is to begin at the other end—by recognising the tastes and habits of the working classes as they now exist, and endeavouring by judicious treatment to gradually improve those habits. To that category we belong. We believe that human nature is the same in every rank of life, and that if the same influences which have operated to reduce the evils of intemperance among the upper and middle classes could be brought to bear on the working classes they would be equally effective. We therefore have founded our club upon that broad basis. We have built a very comfortable room, which will be well lighted and warmed. We offer every facility for reading and writing—we have provided it with the most comfortable chairs—we supply it with the daily, weekly, and local papers, with periodicals, excellent maps, where any member can trace out the abode of friends in distant lands, such as America and Canada—we have the nucleus of an excellent library, which no doubt will be increased by the kindness of our friends, so as soon to fill our empty shelves—we have provided bagatelle and other games, which can be made use of at a trifling charge. We of course prohibit in the strongest terms betting, gambling, or playing for money or money's worth. We provide refreshments in the shape of tea, coffee, and cocoa, all of which are most comfortably served at the lowest possible price. But in addition to these, having in view the principle with which we set out—that we should try to help the working man in his own way, and, by improving his associations and surroundings, raise his own self-respect and make him ashamed to transgress or commit any excess—we also provide him with all the refreshments of an excitable nature which he would obtain at a public-house. In fact, everything that can be obtained at the public-house to which he has been accustomed to go can be obtained here, of, I need not say, perfectly sound quality, and necessarily at a much cheaper rate. I use the word necessarily advisably, because the very principle of a club is that the members should have what is supplied to them practically at cost price. The subscriptions are calculated to defray establishment charges, and what is paid for refreshments ought to be as nearly as possible what the article cost. The result is that our tariff is a very low one. We are able to sell beer, instead of one penny the half-pint, at three farthings, and spirits and wine at equally low prices. Everything has been calculated upon the lowest possible scale, so as just to yield a slight profit to the Club. Our terms of admission are 2s. a quarter, or 5d. a week; so that any working man who chooses to deny himself one pint of beer at the public house in the course of a week can enjoy all the privileges of the Club, or if he drinks a pint of beer a day and has it at the Club, he saves his subscription in the week. We have another class of subscribers to which we attach great importance, that is the library subscribers, intended more for women. That is, I believe, a special feature of this Club. We have taken a great deal of pains to ascertain what the wants of our neighbours are, and we think this will be of great use. For 5s. a year those not related to members, including females, can enjoy all the benefits of the Club up to five o'clock in the summer and four in the winter, and partake of all refreshments except excitable articles—read the papers, write their letters, bring their work here or their lace-pillows, and sit under the balcony outside, or inside. The hours of admission are from ten in the morning to ten at night on ordinary days, and from eleven to eleven on Saturdays. We have also, after due deliberation, and I am thankful to say with the full sanction and approval of our excellent clergyman, determined to open it on Sundays, from two till five in the afternoon and from eight till ten at night—(cheers)—and I sincerely believe we shall do nothing wrong in having determined on that course, or violate what all Englishmen respect—the due religious observance of the day of rest."

I have no hesitation in affirming that this Club has been formed on a sound basis. A well-considered set of rules and



bye-laws have been adopted, which are published by Harrison and Son, St. Martin's Lane, London. Those about to establish a Club will do well to obtain a copy.

From a letter Sir Philip has addressed to me upon the subject I extract the following:—

"The St. Margaret's Club has 130 ordinary members. In December last we had 1,027 separate attendances of members, and the consumption of beer and ale was not quite three-quarters of a pint per head; and although I should like to see the consumption diminish, there is not much to complain of. I already see great improvement in the habits of old *habitués* of public-houses. The co-operative principle has been brought to bear on the supply of tea, petroleum oil, and coal; and, notwithstanding the very low prices at which the articles are supplied, we have realized in four months about £30 profit, thus proving that the Institution may be made more than self-supporting. A Penny Bank and Thrift Society in connection with the Club has also been established."

In no part of the country have Village Clubs taken such deep root as in the county of Suffolk, no fewer than twenty-four having been already established. They are, of course, of various sizes, adapted to the requirements of the different parishes, and are affiliated to the Suffolk Village Club and Reading Room Association. The objects of this central Association are to assist existing Clubs and Reading Rooms in a variety of useful ways, and to aid in the formation of new Institutions of the kind throughout the county.

Since my paper was finished I have received from Mr. Robert Johnson, of Boyton, Woodbridge, Suffolk, a communication of so much interest that I have struck out many of my own remarks, in order to find room for his practical statement, to which I invite careful attention, Mr. Johnson having had so much practical experience of the subject:—

"Boyton, Woodbridge, Suffolk,  
January 25, 1879.

"MY DEAR SIR,—You are kind enough to ask me to write you on the subject of Village Clubs. You doubtless wish me to condense into as small a space as possible the little I have to say. With this view I will arrange my letter under three heads:—

"1. As to our Suffolk Village Club and Reading Room Association.

"2. As to Village Clubs and Reading Rooms in general.

"3. As to the future of such institutions.

"1. AS TO OUR SUFFOLK VILLAGE CLUB AND READING ROOM ASSOCIATION.—By reference to the reports, of which I send copies, it will be seen that our Association was started in June, 1875; that at the end of the first year we had seven clubs in union, at the end of the second year eighteen, and at the end of the third year twenty-four. The fourth year, which will end in May next, will show a similarly satisfactory condition of steady progress. Some of these Clubs are small, some are very large; many may be said to owe their existence in great part to the aid given by our Association to local effort; but, once set going, the Clubs appear slowly, but surely, to develop themselves. This steady and practically uniform rate of progress convinces me that the Clubs meet a very real want; that they are the result of no mere passing popular 'fad' or 'fancy,' but that they are the natural outcome of the desire for a somewhat better and higher life on the part of the class of persons who use them. I am certainly of opinion that any county would do well to start a similar association. A county offers a workable area, and the leading men in each county are the best possible judges of what will suit their locality. Men are proud of their native county, and the local *esprit de corps* should be made available. A small committee of active men could start and work such an association in any county in England. Our success in Suffolk is greatly due to the unwearied exertions of Lord John H-rry, who devotes himself in the most single-minded manner to this and other efforts for the benefit of the working classes.

"2. AS TO VILLAGE CLUBS AND INSTITUTES IN GENERAL.—These institutions do not 'draw a man from his home,' as is sometimes alleged. They may draw him from questionable places of resort. "The young man with no family ties, the man of a social turn, who will turn out after supper to have a chat with his neighbours—these are the men who frequent Village Clubs and who, if there be no Village Club to frequent, will go elsewhere. "To these men the institution is

of positive value. It gives them rational, and possibly, *improving* recreation. At the same time it holds out to them no temptations to excess, and they may leave the Club, as they entered it, with *all their money in their pockets*. "The balance-sheet for the past year of one of our Suffolk Village Clubs has just been laid before me. The Club is a flourishing one, in a large country village. It has above 100 members. It has a refreshment room—beer, tea, coffee, tobacco, biscuits, &c., &c., are sold to the members. It has rooms for reading, smoking, and games, and recreation ground. The Club is entirely self-supporting, except that the premises are let to it at a nominal rental. Now, the average expenditure of the members of this Club has been less than 4d. per week. Is not this, as far as it goes, a proof that the workman can be, and is, *temperate* in his recreations when the means of being so, are placed within his reach?

"I will quote one more example. I know a Suffolk parish in which the earnings of the young men are large. It used to be considered quite the thing for them to pay about 6s. or 7s. a week for their board and lodging, and to throw away the remaining 7s. to 10s. at the public-house. Any expenditure under 1s. a night per head was thought niggardly. The publican made his fortune, and the young men were as penniless at the end of each week as though each had had a wife and six children to support. "A Club was started, and the expenditure of the same set of young men became almost *nil*. They passed their evenings quietly and rationally; they saved money, and when they marry some of them will have £100 a-piece with which to set up comfortably in housekeeping. If this result could be obtained in every parish in England the reproach of unthriftiness would soon cease to be applied to the English labourer. "In Suffolk our lending library is much valued. We keep each Club supplied with a parcel of forty books, exchangeable as often as may be desired. Our association also promotes a large number of lectures in villages during the winter season.

"I attach a very high value to the educational work of these Clubs. All the little boys are now taught to read and write in the village school. Why should they not have the opportunity of turning their acquirements to account in the best possible manner? We hear many complaints, not always ill-founded, of the stupidity and brutality of the young English peasant. Surely the effect of these Clubs will be to foster in him some degree of culture and intelligence, to the advantage of himself and of everyone who has anything to do with him.

"One practical bit of advice I would give: let your building be *large* enough; *never* mind if it be *rough*; a boarded building, with a brick floor sanded, with a cheerful fire, good light, and plenty of room, will answer far better than one of far greater architectural pretensions but of half the size. If possible divide smokers from non-smokers; let readers have a quiet little room by themselves; do not let *boys* occupy the same room as *men*; have a good lavatory arrangement with a big looking-glass—'wash and brush up' is a great civiliser. In fact, make the place *roomy, homely, bright, and comfortable*. "If possible let a recreation ground be attached to the Club-house, and let it be large enough for outdoor games. Let there be a shady corner or two, in which the more staid members of the Club will gather and read their papers and smoke their pipes on summer evenings. "It is most important that a club should be managed on a broad parochial basis: it must be a *public* institute; it must not be a church club, or a chapel club, or a Tory club, or a Radical club. We, in Suffolk, have managed to steer very clear of this difficulty. We keep party politics, sectarian and trade questions out of the clubs as far as possible by making it distinctly understood that the Club floor is neutral ground, on which Churchman and Dissenter, Conservative and Liberal, Unionist and non-Unionist, may meet for common objects, and, perhaps, learn that there is not much to quarrel about after all.

"Finally, as to the future of this movement. I look forward to a time when, under perhaps an improved form of village government, 'The Village Hotel and Institute,' with its reading, conversation, and refreshment rooms—its accommodation for travellers—its public rooms for meetings and lectures—its recreation grounds, &c.—managed by the Municipality for the public benefit—shall have taken the place both of the public-house and of the Village Club, combining the advantages of both institutions in a complete and unobjectionable

form. Meanwhile our Village Clubs meet a real want, can do no harm, may do very much good, and perhaps pave the way for something better.

ROBERT JOHNSON."

At Stockcross, near Newbury, Sir Richard Sutton, Bart., erected, in 1873, a handsome Club House, which he munificently presented to a social club established in that village. A most interesting account was given of it, with suggestions for starting similar clubs in country parishes, in a pamphlet by the late Rev. J. Adams, Vicar of Stockcross, copies of which may be obtained of Blackett and Sons, Newbury. In this pamphlet I find the following remarks:—

"Stockcross Social Club for Working Men was started in the autumn of 1873, and has now one hundred and ten members, about one-eighth of the population of the parish. Most of the inhabitants live in two villages a mile apart from each other, which are cursed with no less than nine public-houses and beer-shops. Excessive drinking has prevailed amongst the poor in both those villages, accompanied with frequent cases of disorderly conduct and much poverty. But, since the establishment of this Club, the working men, instead of tipping at the beer-shops, have spent their leisure-hours in innocent recreation, and hardly an instance of unruly behaviour or of intemperance has been seen in the parish. 'The Club,' said the village policeman to one who asked his opinion of it, 'seems to have taken away my occupation.' To show how conducive to moderation such a society is, and how little the labourer is disposed to waste his money in beer, if he can be kept from the beer-shop, this striking fact may be mentioned, that although the quantity of beer allowed to be drunk by each member of the club has been two pints every evening, it is found that the quantity consumed has not averaged one pint, and that the expenditure has been only about five farthings a day for each customer."

I am glad to learn from the present Vicar, to whom I wrote last week, that although Mr. Adams has been removed by death the Stockcross Club still flourishes and continues to exert a good influence in the place.

With respect to the management of a Club, in a letter I received from the Rev. Canon Hopkins, of Littleport, Isle of Ely, who has had practical experience, he remarks:—"It appears to me of prime importance that the managing committee should consist of working men, i.e., of ordinary, not honorary-members of the Club; they understand their own wants better than we do, and manage the furnishing, cleaning, &c., far better than others do; they will be glad to have help from the honorary members and council; and that they may be trusted not to do anything foolish or unbecoming with their own money. I feel very glad you are bringing the matter before the Farmers' Club."

Mr. Lawes, of Rothamstead, bore similar testimony in a paper which he contributed to the *Roy. Agricultural Journal* some two years ago, and in which was given a very interesting description of a Village Club he had established in his own neighbourhood. As an instance of a successfully managed club, self-supporting for many years past, it would be difficult to point to a better example.

In conclusion, I would observe that I have not in this paper advocated a system which I am not prepared to carry into practice. On the contrary, the plans for a Club-house for my own village—Clapham—are already completed. Further, I have not brought the subject before the Club entertaining the view that it is a work which tenant-farmers should undertake; I know too well the financial difficulties of their present position. The object I had in view was, that the discussion of the subject might attract the attention of those who are well able to apply a need, the existence of which there is no lack of examples to prove.

Mr. FREDERIC HUNT (Harmondsworth), though a young member of the Club, had been very much interested in the management of village clubs for the past seven years, and could speak from experience of the benefits they conferred on an agricultural community. He had been much interested in listening to Mr. Howard's paper. On one or two points he could say a word or two which might be interesting. With regard to public-houses, he could quite endorse what Mr. Howard had written with regard to the character of the men who kept those houses. In many cases it was not the fault of the publicans that excesses were prevalent. There was a

house not 100 miles from his neighbourhood which was rented at between £55 and £40 a year, and the brewer let it to the publican for £30 a year, on condition that a certain quantity of beer should be consumed. It was obvious that under such circumstances no publican could live unless he made his customers drink to excess; and that was one reason why he (the speaker) and others in his village established a village club. In that club they had seventy members, and practically there was no restriction in regard to the quantity of beer supplied. The number of members attending on the average each evening was from ten to fifteen. The beer bill for last year was under £5 for the whole of the members. This proved decisively that those who frequented the village club at any rate were not given to intemperance in any shape; and that the agricultural labourers as a body would not drink to excess if they had the means of social enjoyment one with another, without the necessity of seeking it at a public-house. It was, in his opinion, very important indeed that these clubs should be taken up by the employers of labour, rather than be left to the clergyman or the landowners of the parish; but if the tenant-farmers were not able to build a club, they might get the landlords to build them and take part in the management. As to the management of the club in which he was interested, they had a committee of nine members—six were working men and three gentlemen; and all were ordinary members of the club. This arrangement worked admirably. The working-men members of the committee were always ready with their suggestions and opinions on all business matters that came before the committee; whilst the advice of the gentlemen was valued equally by them. He had sat on the committee since the formation of the club, and the composition of the committee had worked admirably during the whole time. He would repeat that it was a matter for tenant farmers to take up with great interest and energy. He was satisfied that Mr. Howard was correct in his view that the following up of the Education Act was of equal importance to the Education Act itself. He did not anticipate—without now losing all hope—that any village club would attract the habits of the public-house; but, to be successful, the aim of the clubs should be to attract the young men and boys, such as young carters who were in lodgings, in houses filled often with the steam from the washing going on, and who, consequently, would go out of an evening to have communication with their fellow-workmen, and find their way, if there were no village club, to the public-house. They all knew if an employer had the choice between two equally good workmen, one of whom was accustomed to go to the public-house and the other not, that he would choose the latter; and, therefore, there could be no doubt in the minds of tenant farmers that the public-house was a great curse to a village. The influence which a public-house exerted was uniformly bad; and, until that influence was done away with, and the public-house, as it exists at present, superseded by the village club, which had all the advantages of a public house without its disadvantages, they could not expect working men to be less intemperate or vicious than they are. With regard to the beer question in clubs, he thought it absolutely necessary to the success of a village club that beer of sound quality be allowed in unlimited quantity; that there should be no rule as to a limited quantity—or it would be better to throw the men upon their honour—and, if that were done, it would be found that the younger men and lads who came out of the Board schools would appreciate their privilege, as without abusing them.

Mr. A. CROSKILL (Beverley) expressed his regret that they had not the presence of the author of the paper, not only because of the cause which kept him away, but because there must be many present who, like himself, did not concur in the views of Mr. Howard. Mr. Hunt had just expressed his agreement with a great portion of the paper; but it seemed to him (Mr. Croskill) that there was a great deal more wanted, and he should have preferred expressing his dissent in the presence of Mr. Howard rather than behind his back, because Mr. Howard always defended himself with much energy, and might have been able to supply the omissions verbally. One of the things Mr. Howard had left untouched was the answer to the question, "What better are we farmers for having these clubs?" There was a remark in the paper about the difficulty of employers in dealing with their men. That was a difficulty he had felt of late years, and most of those whom he addressed must have felt it. He had the greatest difficulty in getting a

fair day's work for a fair day's wage. (A voice: "Quite true.") The practical question was, "What effect will these village clubs produce upon that point?" That was really the practical question for tenant-farmers in particular. This was a point they might well consider, and it was one on which Mr. Howard might have been able to supply the deficiency in the paper. What good, he repeated, were the tenant-farmers to get from providing these village clubs? Why did not the working-men set up the clubs themselves? When the farmers wanted a club they found it necessary to help themselves and get a place of meeting, and some of them spent a great deal of time and trouble in establishing this Farmers' Club and finding accommodation for it from time to time; and no doubt now they were reaping their reward. If the working-men wanted the clubs, he should like to see them spend some time and trouble about getting them. He could not see why the tenant-farmers and landlords were to take all the trouble. He would like to see the labourers themselves doing something towards the end in view. This was a question which no farmer could approach without asking himself, "How are we to get anything by this?" The real question now-a-days with farmers was how he could make things pay. He could appreciate entirely the feeling of the tenant farmer, who would say, "Before I take much trouble about establishing a village club I should like to know if it will do the labourers good, and have the effect of giving me a fair day's work for a fair day's wage." He had no statistics to quote about the advantages that had attended any particular club. He could quite believe, when they were founded and well-worked, that these clubs were good. It was a good thing to keep the labouring class, as well as all other classes out of the public-house; to keep them from looking to the public-house as the place where they were naturally to spend all their spare time. It would be a good thing to alter the views of the labourer in that respect; but he thought that now, when the most important question to the farmer was how they could make things pay, there might have been a little more in the paper showing what good the farmers were to get, in a practical point of view, from the establishment of these village clubs. There remained the one question: "Is it really our business to help the labourer in such a matter as this?" (A voice: "Decidedly!") Well, a gentleman said "Decidedly"; but he wished to throw out the suggestion, that if the labourers wanted these clubs they should be encouraged to establish them for themselves, rather than to expect that the work should be done for them. It was because he felt the paper had not furnished information on this point that he made these remarks.

Mr. SKEERBO (Bedfamt, Hounslow) said he could not agree with Mr. Crookill, who had said, "Let the labourers do this themselves"; because the question arose, "Do they know how to do it?" When the labourers were shown the advantage of establishing these clubs, then they would take the matter in hand and go on with it without further help. He thought it must be a great advantage to any village to have such a club as Mr. Hunt had described. He believed that club was mainly established through the exertions of Mr. Hunt, who had made many serious sacrifices of time for the purpose. They should be thankful to anyone who would spend their time in that way; and he thought the labourers ought not to be left alone in this matter.

Mr. BOWICK (Bedford) thought this subject had been introduced on a very fitting occasion, seeing that this club had just entered these new and more convenient premises, for the selection of which we were so much indebted to the Committee (Hear, hear). It would be forgiven, he hoped, if, coming from the same county as Mr. Howard, he supplemented the paper which had been read, by saying that Mr. Howard had done what a previous speaker would be glad to hear of viz., he had saved the pockets of his neighbours by promising to provide a club and appliances, and place the same in the hands of trustees, but leaving it to the more intelligent working-men to manage. That the working-men were qualified to do that, with the assistance of honorary members, there was sufficient evidence given in the paper; and, so far as he had observed, that assistance was not disliked. It was quite true that in some instances there might be a jealousy of the squire or the parson, but with prudent management there need be no such feeling. If gentlemen were desirous of a more practical acquaintance with the subject than could be given in the limited space of a paper, he would suggest inquiries at the

Working Men's Club and Institute Union, 150 Strand. Union was strength, and in the Union there were some 700 clubs associated, with more than 100,000 members, and doing good work in the land in which we live. A good deal had been said both in the paper and by the speakers on the beer subject. That was a tender subject, in regard to which some blamed the public-house and others thought the public-house less to blame than the drink. He thought they could not get much further on that than the late Lord Althorp, who, when presiding over a committee of the House of Commons on the subject of intemperance, came to the conclusion that "the cause of drunkenness is the drink." It was not so much the drinking-house as the drink. In Mr. Howard's own village there was a ratio of one public-house to every 100 inhabitants. Whether that was a proper proportion, or whether too many, he, as a testotaller for a quarter of a century, might not be very competent to decide; but, testotaller or no, he looked only at matters as they stand. There was the fact that men had these social habits and comforts; and he could get no further with his doctrine than this—"Let every man be fully persuaded in his own mind." He did, however, arrive at this fact—that the British workman and the British agricultural labourer often took more than was good for him; and if they could, by any means, lessen his temptations, and by these clubs elevate the tone of their habits, they would be doing a good and right service to those classes. Whether a club could or could not be carried on successfully without "drink"—that is, excisable liquors—was a matter that had been practically decided. Of the 700 clubs in the Working Men's Club and Institute Union 60 per cent. supplied no spirituous liquors, and they were regarded as the most successful specimens of clubs; whilst only 40 per cent. supplied beer and spirits. It was an experiment which each club must try for itself. If there were a Mr. Howard or a Sir Philip Rose in every village, it would only require a moderate subscription from a goodly number of working-men to set clubs up in all parts. It would only be requisite, under those circumstances, to get a subscription of about 3d. a week from 200 men in each village of 700 or 800 inhabitants to make the club self-supporting, so as to provide refreshment and recreation rooms, a library, newspapers, and other things which went to make people comfortable. The question, "Will it pay?" was one in which they were all interested. Yes; it would pay. It would make our country a more sober country—(hear, hear)—a more intelligent country (Hear, hear). That "hear, hear," indicated to him pretty clearly what was the general sense of this club on that point, and he was glad to think it would go forth to the country in that direction. He was glad the subject had been brought forward for one among many reasons, namely, because in the old-fashioned country agricultural associations the question often cropped up, "Is there any new thing we can do?" Well, he would say "Yes, there is one thing which, as a society, we can do, and that is, encourage these clubs, which, if they do not contribute very largely to the result, will, at any rate, help in some degree to lessen the irritation which sometimes exists between different classes in this country." It had been said they could do very well without these clubs, but he believed that in the end they would have an influence in favour of the cause of temperance, and he regarded the movement as one of the "signs of the times."

Mr. SMILEY (Upper Clepton, (N.E.) thought the English people were fast losing their dictionary knowledge of what a public-house meant. When he was a boy, and was asked what a public-house was, he should have said a house kept by a licensed victualler so called because a working man could take his meat there and demand that it should be cooked for him. Ask a country boy now what a public-house was, and he would say, "A place where they buy beer and get drunk." If a London boy were asked what a public-house was, he would say, "Where they drink gin," and it was consequently called a "gin-palace." He repeated that we were fast losing our old notion of what was a public-house kept by a licensed victualler. If the people who often sat on the large tabs kept in public-houses were to ask the landlord to cook raw meat, he would pretend not to understand what was meant by the request. He believed, nevertheless, that licensed victualliers, by the terms of their license, were compelled to cook the food which any working man brought to them for that purpose.

Mr. AYELING (Rochester) said no doubt it would be a fine thing if they could make all workmen sober, but he did not think

these clubs would have much attraction for men who had received no education, and who were so ignorant they could not read or write, as the majority of the older workmen were in Kent, as well as the majority of those who had left the county lately and gone across the water. But those who had received some education ought to appreciate the advantage of these clubs, and when they did so would certainly provide them for themselves. It would be useless to say the men could not do this, when Mr. Arch had shown how recently they were able to raise £17,000. The workmen of England were competent to raise any sum that was required to do them any good; but, if they thought it would not do them good, any other class might do what they liked for them, but the working-men would not follow, because they would have the suspicion that it was being done for the good of some other class. He supposed there was no one who had worked more in the direction aimed at in the paper than he had done during the past twenty years. He would not go into a long story about it, but he might say it had been extremely unsatisfactory. He had given his personal attention to these matters, and the result had been pre-eminently unsatisfactory. Anything the men in Rochester had done had been done on their own footing, and they had established themselves a large club, and had managed it themselves, and the result of that club had been very satisfactory. But this had been done entirely by the younger men, and the younger men only, who were better educated than the older men. Clubs of the kind mentioned in the paper would not, he thought, have the slightest effect upon the ordinary working man, whom most of them so well knew. He should be glad if it was true that a better day's work was done by the men who belonged to these clubs. There was a great outcry in Kent that less work was done; that the wages were not nearly so well earned as previously; that now the higher the wages the less was the money earned. He was only saying what he was told in all the county of Kent. No doubt it was a very trying question, "What is to be done, with wheat at 32s. a quarter, rent not reduced much, and workmen unwilling to work for 16s. a week?" He did not see what was to be the end of it, or where the money was to come from to raise wages.

Mr. W. E. BEAR (Sarbiton) thought that Mr. Howard, in the paper, said he did not expect tenant-farmers to provide money out of their own pockets for Village Clubs. The discussion had, in part, reminded him of a picture in *Punch*, where a little boy was asking a little girl to become his sweetheart; and she replied, "I don't know. What have you got in your pocket?"—(laughter),—for the question had been asked, "What are we to get out of these Clubs?" That was the question, too, which the labourers would ask when they had read Mr. Crosskill's speech. But, in reply to Mr. Crosskill, he would ask whether he had never noticed the difference in men who had been drunk over-night and men who had been sober? He (Mr. Bear) had noticed the former looking rather "sooty," and had also noticed that their work was not worth to him 60 per cent. of the work done by the man who kept sober. Therefore, anything which would keep men sober, as these Village Clubs would do, would undoubtedly benefit the employers of their labour. Perhaps it might be as Mr. Aveling had said, that the older men would not much appreciate these clubs; but they certainly would be a benefit to the younger men; and if they were not provided for the young men, while young men, the young men would soon grow old, too, and follow the habits of their fathers in frequenting the public-houses, the excitement of which would unfit them for the Village Clubs. He did not hear the beginning of the paper; but, if got mistakes, Mr. Howard had said nothing about women being allowed to join the Clubs. ("Oh, yes, he did.") He knew that in the Club founded by Sir Philip Eose there was one of the rooms—the reading room—where women might attend. In Suffolk he had heard of great complaints being made by a clergyman of a village that these clubs did more harm than good, because they attracted the men away from their homes, and the clergyman thought that men ought to go home to spend their evenings with their wives; but very often the wives would rather have their room than their company. He thought it would be an advantage if the wife would go to the Club with her husband, when she had time to do so.

A VOICE: What about the children?

Dr. VOELCKER (Salisbury Square) said, if he was not mistaken, Mr. Howard in his paper touched on the question whether village clubs should or should not be attended by women. He confessed that he had no liking for the attendance of women at clubs of any kind, whether women of the highest rank or the wives of labourers. He thought women should stop at home. That was their legitimate and proper sphere of action, and the less they attended clubs of any kind the better. He would be very sorry indeed to see his own wife attending a club—(laughter)—and he could not approve of the labourer's wife doing so, no matter how innocent might be the pleasures provided there. He thought, indeed, that the pleasures which at the present time labourers found at their village clubs were of so innocent a character that they found it very tedious to attend at all, and considered it much more pleasant to go to the public-house (Hear, hear). He regretted very much that this should be the case, but it was better that they should not deceive themselves. Many of the village clubs were not managed in a way likely to make them attractive to labourers. Mr. Aveling had hit the right nail on the head. If there was a necessity for village clubs at present, as he believed there was, there would be a still greater one when they had got young people properly educated, as they must be under the Elementary Education Act. Village Clubs would then have a great future before them, and it was well that they should even now look around and see in what way they could help them. He perfectly agreed with Mr. Aveling that the management must be left entirely to the men themselves (Hear, hear). There must not be anything in the shape of patronage, or anything of that kind, because the men were quite shrewd enough to understand such matters. They knew very well that a fair day's work must be done in order to obtain a fair day's wages, and they would, as regards the matter under discussion, be certain to ask what right people had to interfere with them. He would repeat that, in his opinion, the management of village clubs ought to be entirely in the hands of the labourers. At the present time however, the men generally were too ignorant and too little educated for work of this kind, many of them not being able even to read or write; and it appeared to him that, notwithstanding what they had heard of the success of village clubs, they had been to a great extent a failure—or if not a failure on the face of them a failure in reality. Many of them were very poorly attended. The club-house was kept up in a certain way, but it was by no means a success; and, inasmuch as working-men were not now in a position to manage clubs properly themselves, but must look mainly to the future—they must look to what would be done with the rising generation to make village clubs successful and beneficial, both to the labourer and to the country.

Mr. C. M. CALDECOOT (Holbrook Grange, Rugby) said there was a club in a village adjoining his home but it was not opened until last September, and therefore there was not much to be said in the way of experience. No intoxicating liquor was allowed. One part of the discussion had surprised him—he meant that which related to the attendance at such clubs. He had found that many of the older labourers spent a large part of their evenings at the club to which he alluded. One man, who was older than himself, went there regularly in the evening. He concurred in the opinion that the practical management should be left to the men themselves. It was, perhaps, desirable that there should be two or three advisers among them; but there must be nothing to make them feel that there was possibly something behind the scenes which was not quite consistent with good intentions towards them. He did not see how small village labourers were themselves to start a club (Hear, hear). It was not, he thought, the duty of tenant farmers to advance money for that purpose; but it would be well if some of the landed proprietors, or some benevolent persons living in the neighbourhood, were to provide means for building and paying the necessary expenses of starting. He had been gratified at perceiving how not merely the younger class of labourers, but men of middle age, appreciated the village club to which he alluded (cheers).

Mr. HIBBIS (Ivinghoe and Trinz), said he believed there was no gentleman in that room, or he might add in any other room of the same kind, who was not fond of drink of some kind or other—(laughter)—and he thought it would be found on a careful comparison the total consumption of testallers was quite equal to that of persons who drink

spirits or beer (Laughter). It appeared to him at that discussion on village clubs was in reality a discussion on the question of intemperance or non-intemperance among labourers (Hear, hear). He thought they must go to something rather deeper than club questions to make men temperate. It was an undoubted fact that the Germans, as a nation, consumed double the amount of beer which was consumed by the English nation, and yet they were not generally looked upon as a very drunken people (Hear, hear). If beer were not allowed, what was to become of the barley? (Laughter). One gentleman had remarked that the question was a pocket question. Of course it was. Every question in this world must to a great extent be one of pounds, shillings, and pence. He ventured to say that if the Excise authorities were authorized to allow the general manufacture of wholesome drinks, instead of a system being continued which encouraged the manufacture of drinks of the most intoxicating character, more could be done in that way than could be done in any other to make the people temperate. Why should not the people be allowed to make their own beer, as the Germans did? Why should men not be permitted to use grain in a raw state without being mulcted? Why should farmers and others be prohibited from doing what would clearly be the best for themselves and for the country.

Mr. J. K. FOWLER (the Prebendal Farm, Aylesbury,) said as regarded the objections of Mr. Crosskill and others to the paper of Mr. Howard, whose absence they all deeply regretted—(cheers)—he firmly believed that if Mr. Howard had been present at he would have been able to answer those objections in a satisfactory manner. He (Mr. Fowler) happened to live in the same county as Sir Philip Rose, and he knew what pains he had bestowed on the Village Club with which his name was associated. He held in his hand a newspaper containing a report presented at the general meeting of that club which was held a few days ago, and there were two or three statistics which were interesting enough to be cited in that discussion. The club was opened on September 4 last, and he wished to show what amount of tea and coffee had been consumed, and what amount of beer and alcoholic drinks. It appeared from the report that there were consumed 4,257 half-pint glasses of beer, 1,652 glasses of ale, 858 half-pints of beer &c., heated with sugar and spice, 19 bottles of bottled stout, 105 half-gills of wine, 33 bottles of wine, 21 half-bottles, and 14 quarter bottles in addition to spirits. He would not give the prices, but would state the results. The amount spent on beer, ale, and stout was £22 5s. 3d.; on wines, £6 4s. 7d.; and on spirits, £10 18s. 4½d.

A MEMBER: In what period.

Mr. FOWLER: About four months.

The MEMBER: How many members are there?

Mr. FOWLER said he believed that there were nearly 200, and that they were all working-men. The village was formerly one of the most benighted villages in the whole district, being situated amid the woods of the Chiltern Hills, and it was now one of the most delightful spots in the county, Sir Philip Rose, Lord Howe, of Penn, and Mr. Grove, of Penn, having made it quite an oasis in the desert. The total amount spent on alcoholic drinks during the four months was about £40. Let them "look on this picture and on this." The consumption of ginger-beer was 421 bottles. The whole amount spent on tea and coffee was £2 1s. and something. (Laughter.) There were 473 teas, 328 coffees, and 149 cocoas, the total amount expended on the three being £3 19s. 2d. He might well say, as Prince Henry said in reference to Dame Quickly's bill against Falstaff, at the Boar's Head, Eastcheap, "One halfpenny-worth of bread to this intolerable deal of sack!" (Laughter.) All this tended to show that the labouring classes would consume alcoholic drinks, and he did not blame them for it. With a climate which was so often uncomfortable, and amid such wretched weather as we had lately, they could hardly be condemned for the sort of consumption to which he was now alluding. The average quantity of beer consumed was, it appeared, less than a glass and a half, or under three-quarters of a pint per head of attendance—a fact which proved that agricultural labourers as a body were not the kind of sots that they were at times represented to be, and that if reasonable precautions were taken they were not likely to go to excess. Having been thrown very much among agricultural labourers for many years past, he must say that he had found them a most intelligent class of people, and he might

even call many of them intellectual men (laughter). He would appeal to Mr. Crosskill, Mr. Aveling, Mr. James Howard, and other men so intimately connected with agricultural machinery, whether they had not found among labourers a large proportion of men who were most apt and excellent scholars; whether, after a few lessons, such men as he referred to had not proved themselves well fitted to have the care of most important implements of husbandry (Hear, hear). Having for many years used the steam-plough and other valuable machines, he must say that his experience of such men was very favourable. In his opinion agricultural labourers were a maligned body, and he was confident that if they were educated as they ought to be, and if their energies were rightly directed, they would be able to hold their own against the rest of the community (cheers). He thought that question was one fraught with interest to the public at large, and especially to the rising generation of labourers. As a matter of public policy it was desirable that the formation of village clubs should be encouraged, and they had had sufficient experience of them already to show that, if the principles of temperance were properly inculcated, they need not resort to totalitism to make men temperate (cheers).

Mr. CHARLES HOWARD (Biddenham, Bedford) said he was not going to attempt any reply on behalf of his brother because he had not been instructed to do so, and also because, in consequence of an accident which had befallen him, he had not seen the paper beforehand, as it had been intended he should do, and thus become familiar with the way in which the subject had been treated there. However, he felt compelled to say that he was surprised to find his friend, Mr. Crosskill, who knew his brother so well, should have expected him to treat this subject from a narrow point of view. His brother, like Mr. Crosskill himself, held broad views, and he did not think he had, by the manner in which he had spoken, done his brother justice. His brother had no intention of entering into the question whether or not the thing was going to pay, or how far it was likely to affect the tenant-farmer. Mr. Crosskill asked, if labourers wanted village clubs, why did they not do what was necessary themselves? It was evident that men of that class were not in a position to build such places for themselves; but they had learnt from the paper and the reports to which his brother had alluded, that those who have had the management of such clubs had in many instances made them not only self-supporting but profitable. As to public-houses, he believed that if they were properly conducted they would see but little of the evil effects which were now observable around them almost every day. He was happy to say that they had in his own parish a model public-house. It was the only one in the place, and was conducted by a most respectable man. No drunkenness was allowed, and the house was not open on Sunday, people only being supplied between the services with what they wanted to drink off the premises. He believed that if the brewers throughout the country and the owners of public-houses were more careful in the selection of their tenants, there would be less cause to complain of the drinking propensities of the people. (Hear, hear.) Something had been said about farmers having no interest in this matter, but he believed that to be a mistake. He thought it would pay farmers indirectly to do something towards forming a well-conducted set of labourers. None of them who had any experience of harvest-work, or of work in the busy seasons of agriculture, could be ignorant of the fact that when a man had had a drinking bout he was the worse for it, not only for the time, but for two or three days afterwards. On whose shoulders did the loss fall? It certainly was felt by the man's family first of all, but it was also felt by his employer. He thought therefore, that any movement which tended to promote temperance among labourers was likely to prove beneficial, not only to them, but to farmers. His friend from Buckinghamshire need not be afraid that for the present time he will have no demand for his barley. (Laughter.) The fault he (Mr. C. Howard) had to find with the discussion was, that it had turned too much on the question, "Drink, or no drink." (Hear, hear.) That was not the question raised in the paper. The question put before them there was the importance of the establishment of Village Clubs, and he thought it was hardly just to his brother to treat it as if it turned merely on drink. He was sure his brother would be glad to hear that his paper had been so well received, and also that it had met with such

very wholesome criticism from some of his best friends—(laughter)—and, he might add, some of his political friends. (Renewed laughter.)

The CHAIRMAN, in summing up the discussion, said: Gentlemen, we have had an interesting paper, and I think we have also had an interesting and very useful discussion. I am, unfortunately, as you know, a brewer—(an exclamation, "Fortunately," followed by laughter)—but I shall not presume to take advantage of my position as chairman to say what, perhaps, I might say if I were an independent listener. I occur in very much of what has been said on this occasion. I am quite sure that no set of men can be wrong in joining heart and hand to do what they can to promote the cause of temperance; but I must say that a few expressions have been made use of which I do not endorse, and which, from the experience I have gained, which is not limited, I feel sure are not exactly correct. For instance, it was affirmed boldly, and without any discrimination or distinction, that public-houses are uniformly bad. I believe that that opinion is quite wrong. Our friend, Mr. Charles Howard, says that the public-house in his village is a well-conducted one and does credit to the place. Another remark—not immediately connected with my own business—in which I cannot concur, is that labourers' wives like their husband's room better than their company. I do not believe that that is really the case. (Hear, hear.) I think it is a national characteristic that English husbands and wives are fond of each others' society. (Cheers.) Of one thing I am quite sure, namely, that the working-men of this country will not be dictated to as respects what they shall have to drink or how much of it they shall have; and I must say that if I were asked to join a club one rule of which was that a member might have a pint of beer before five o'clock, and another pint after five, I would not join it. I will only say further that I am sure we all feel much obliged to Mr. James Howard for the trouble he has taken in preparing the paper, and that we deeply regret his absence and the cause of it, and are also much indebted to his nephew Mr. Farrar, for reading it. It is not usual for the Chairman of this club to propose a vote of thanks to the author of a paper, but I take this opportunity of doing so, in order to show that, although I am a brewer, I can easily and heartily co-operate with anyone who, while willing to concede to others the same liberty as he claims for himself, desires to promote the cause of temperance and sobriety throughout the country.

Mr. E. SMYTHIES having seconded the resolution, it was put and carried, Mr. C. Howard being included in the vote; after which, on the motion of Mr. CHEFFINS, seconded by Mr. ADKINS, thanks were voted to the Chairman.

## M I D L A N D

The annual meeting of the members of this club was held on Feb. 5th at Birmingham, Mr. H. A. Howman (vice-president) presiding.

After dinner, the SECRETARY read the fifteenth annual report, which stated that, after the payment of all demands upon the club, and the whole of the subscriptions had been received, there would be a balance in hand of £99 6s. 8d. (Applause.) The club consisted of 217 members. Allusion was made in the report to the visit of the members of the club to Messrs. Webb's farm at Wordley, and to the appointment of Mr. A. A. Sylvester as secretary in the room of Mr. J. B. Lythall.

On the motion of the CHAIRMAN, the report was adopted.

Mr. JOHN LOWE proposed:—

"That Mr. A. H. Howman (vice-president of the club) should be appointed president for the ensuing year."

Mr. FARRER seconded the proposition, which was unanimously adopted.

Mr. J. LOWE proposed that Lord E. nest Seymour should be invited to hold the office of vice-president for the ensuing year.

The resolution was carried unanimously.

Mr. FARRER read a paper on "The Conversion of Arable into Permanent Pasture Land."

**BUSINESS.**—A young man in Nebraska sent an offer of marriage to a girl whom he fancied, and in reply received this telegram—"Come on with your minister."

## Chambers of Agriculture.

### C E N T R A L.

The first Council Meeting of the present year was held on February 4 at the rooms of the Society of Arts, Adelphi, the President, the Marquis of Huntly, occupying the chair.

The noble Marquis, on taking the chair, said he felt highly honoured in occupying the position in which that Chamber had placed him by electing him President for the year, and he could assure them that he desired to perform the duties of the office in a manner which would be useful to the Chamber and to agriculturists generally. The work the Chamber ought to do and was capable of was never more needed than at the present time. They were passing through the most depressed period in the history of agriculture, and many landlords and tenants were at a loss to find a remedy for the state of matters. Nor could they tell where the downward course stopped. The Central Chamber of Agriculture represented more than any other assembly in the country strictly agricultural interests, and it was their duty to endeavour in every way they could to promote legitimately the cause in which they were interested. There were Acts of Parliament of ancient date which might be modified or repealed to suit the times. Many old customs which restricted the outlay of capital, and checked its application towards the improvement of land, should now be looked upon as obsolete. There were many who thought, and he confessed that he agreed with them, that the incidence of taxation fell unequally upon the cultivators of the soil as compared with the inhabitants and manufacturers in towns. One had only to look into the question to perceive that the equalisation of rating for both imperial and local purposes would give a considerable relief to the owner and occupier of land. There was much to be done by scientific research in applying more knowledge and science to the principles of agriculture, while at the same time they might learn to provide for the more economical and properly directed application of artificial manures and the use of feeding stuffs. Thus many new paths might be discovered which would tend towards the improvement and advancement of agricultural industry. The subjects could all be brought before the Chamber, and while they watched the various new measures in Parliament which affected their interests, they must also strive hard to obtain the remedy of abuses, and endeavour to lead the van of improvement. Firmly convinced that the interests of the owner and occupier of the soil were inseparably bound up together, he had been pleased to see that so many landlords had come forward to assist their tenants during the present great depression. He believed the concessions which must be made would not stop here, but that greater freedom must be given to the tenants in the cropping and cultivation of the soil (cheers). In conclusion his lordship assured the Council that it would afford him great pleasure to assist the Chamber in the consideration of difficult questions affecting agriculture which seemed ripe for solutions (cheers).

The minutes of the last meeting having been read and confirmed, the Council proceeded to consider the first question on the agenda, viz., "Whether any action should be taken with regard to pleuro-pneumonia from America?"

Mr. W. STRATTON moved:—

"That in view of the recent importation of cattle infected with pleuro-pneumonia from America, this Council resolves to memorialise the Privy Council to put in force the power conferred upon them under the Contagious Diseases (Animals) Act, 1878, with regard to the farther importation of animals from America and Canada."

He considered it illogical that the slaughter of animals coming from the Continent, where disease was known to exist, at the port should be compulsory, and yet that the order should not apply to cattle coming from Canada and the United States, where it was also known to exist. He felt certain that the slaughter of those animals at the ports would not restrict the supply of meat in any way, and the experience of the Acts since they had come into operation showed that there was no reason for apprehending a rise in the price of meat. He hoped the Government would act with energy and consistency in the matter (Hear, hear).

Mr. BOWEN JONES having seconded the motion,

Mr. SMYTHIES contended that it was not desirable to pass such a resolution, especially as there was no proof of disease

existing in Canada, and the Government were not at all likely to subject it to restriction.

Mr. TREADWELL expressed regret at opposition from such a quarter.

CAPT. FITZGERALD remarked that there could be no doubt that Dutch cattle infected with pleuro-pneumonia had been sent out to Canada, and had afterwards been exported to this country, bringing with them disease.

The CHAIRMAN observed that the resolution before the meeting was agreed to by the Business Committee, after a long discussion, and added that, supposing Canada to be excluded from the schedule, it might afterwards be restored if sufficient ground were shown.

The resolution was then adopted.

On the motion of Mr. BELL the committee on cattle diseases was re-appointed.

CAPT. CRAIGIE presented the following report from the Weights and Measures Committee:—

"Your Committee are glad to be able to report that the Board of Trade have agreed to the first of the prayers of the memorial from the Council presented on the 9th of December last, and that an Order in Council will be issued forthwith legalising the case of a new imperial denomination of 100lb. They regret, however, to have to state that as at present advised the Board of Trade do not see their way to legalise at the same time the use of a weight of 50lb. the half cental. Your Committee trust that the objections felt by the Department to the employment of a standard so convenient and so necessary in sales of grain by weight may ere long be overcome, and that the general adoption of the cental may be facilitated by the provision also of a half cental weight.

"Your Committee have had brought under their notice the unsatisfactory and misleading character of the mode of determining the official coin averages under the 27th and 28th Victoria, c. 37. At the present time, when sales by weight are largely increased throughout the country, the modes adopted by the local officers of the Government in returning the prices of grain are more than ever irregular and inaccurate. The question of determining by statute an assumed equivalent for the conversion of sales by weight into the imperial quarters required by law, raises an urgent and important question, while the older grievances of the insufficient data supplied, the combination of returns of British and foreign produce, and the generally defective nature of the official figures, are all matters deserving attention. Your Committee therefore venture to recommend either the discussion of this subject by the Chambers or the appointment of a Committee to deal with the matter and report."

On the motion of Captain CRAIGIE, seconded by Mr. CALDECOTT, it was agreed that this report be received and circulated.

Mr. P. PHIPPS, M.P., as Chairman of the Education Committee, said that it was working on the lines laid down at the last meeting, but that for the present there was no necessity for a report.

On the question of the election of a vice-chairman for 1879, Mr. PHIPPS said he had great pleasure in proposing Col. Ruggles Brise, M.P. for East Kent (cheers), who had long been a member of the Central Chamber, and had taken an active part in its discussions, and also was chairman of the Essex Chamber, adding that he felt sure that a man of such practical character and of so much ability would perform the duties of the office in a satisfactory manner.

The motion, having been seconded by Mr. GLENNY, was put and carried unanimously.

Mr. CLAY having been appointed Treasurer, on the question of the election of a paid secretary.

Mr. J. A. CLARKE rose and said it was 12 years since the Council appointed him secretary, and he had now to announce that, having removed from London and taken up his residence at Long Sutton, whence he originally came, and entered upon an undertaking there which would preclude his attending to the business of the Chamber in the manner required for one holding the office of secretary, he wished not to be nominated again. His tenure of office would expire at the end of the present month; of course it would be for the Council to consider whether they would proceed to make an appointment on that occasion, or whether they would postpone the matter till the next meeting, or to a special one, to be convened for the purpose.

After some discussion the following resolution was passed:—  
"That it be referred to the Business Committee to consider respecting the duties and salary of the secretary, and that they be authorised to take such steps as they may deem advisable to procure and recommend candidates for the office; and until a new secretary is appointed Mr. Clarke be requested to act as secretary at his present salary."

Professor WILLIS BUND presented the Report from the Highways Committee, and moved that it be received and adopted:—

The motion of Professor Bund having been seconded by Mr. W. Stratton,

Mr. LLOYD proposed an amendment, to the effect that what was recommended in the case of locomotives should be extended to licenses for all kinds of vehicles.

After some discussion the motion was agreed to.

The next matter on the agenda being the consideration of the Law of Distraint,

Mr. HODGES said that question had been placed on the paper at the instance of the East Kent Chamber, which he represented. The attention of the agriculturists of Kent had lately been called to the existing state of the law, and the hardship which arose from its operation, by a case which had been under their particular observation. The subject had been fully discussed on two occasions by the Chamber, and at both meetings resolutions were passed by considerable majorities in favour of amending the law. The first of the two resolutions which he would now propose was, "That a landlord may recover by distraint rent for two years only." On that point, however, he must say that the Kent Chamber was not quite unanimous. At the first meeting a resolution was adopted that distraint should be limited to one year, the law being thus assimilating to that which held good when the tenant became bankrupt, in which case the landlord was empowered to recover a whole year's rent in value, and was entitled to take his dividend with other creditors for any additional rent that might be due. But at the second meeting of the Chamber, at the instance of a Conservative peer and large landowner, Lord Sondes, the resolution was altered to three years. Under these circumstances he (Mr. Hodges) had taken the mean between the two periods, after consultation with gentlemen who had paid much attention to the subject. The second resolution which was passed, and which he would now propose, was, "That liberty to distraint for rent on property belonging to persons other than the tenant should be abolished on satisfactory proof of over-ship." The two resolutions hung well together, but it was for the Chairman to say whether or not they must be discussed separately.

The CHAIRMAN decided that they should be considered and dealt with together.

Mr. HODGES continued: The Council would, he said, observe that that was no attack on property, but simply an endeavour to make the law more equitable. No doubt there were powerful arguments in favour of the landlord having for a limited time a priority of claim. Under the existing law, however, the landlord could recover arrears of rent extending over as much as six years. It was a matter of private understanding and arrangement when the rent was not enforced, and he contended that where a landlord was foolish enough to let his rent stand in abeyance he ought to accept the risk, and not maintain on his land a tenant whose possessions in the shape of stacks of corn, farm-stock, implements, and so on, gave his neighbours the idea that he was a man of substance, when in point of fact he was a man of straw, and everything he had was at the mercy of his landlord. Cattle and sheep had to be kept on the land for the consumption of the roots grown upon it, this being in some instances made an absolute condition for the benefit of the soil; and if the tenant had no capital, or no live stock of his own, he had to take his neighbour's animals to keep, which thus became liable to seizure for rent. Further, the outside public had some interest in the matter, inasmuch as there were but few farmers who were not more or less dependent on credit. At the present time they heard on all sides how depressed were the circumstances of a vast number of agriculturists, and it must embarrass their credit very seriously to retain the law in its present state. Upon the whole, then, he thought the question was deserving the consideration of the Chamber whether the time had not arrived when it might appeal to the Legislature in favour of such an alteration in the law as he had indicated, the necessity for which was admitted by so large and influential a landowner as Lord Sondes.



The resolutions having been seconded by Mr. Lawrence,

Captain DELF said he held opinions on that subject of a much more sweeping character than those of Mr. Hodges, and was prepared to support the total repeal of a law which he thought ought not to exist under present circumstances. To give the landlord even two years' preferential credit was tantamount to shutting out the ordinary creditor altogether from any kind of privilege, and would virtually deprive him of his debt. In fact, they might as well make the period four or five as two years. He moved, therefore, as an amendment—

"That the existing Law of Distraint ought to be repealed."

Mr. MANSFIELD held that it was quite right that the landlord should have a prior claim upon the effects of the tenant; but at the same time he must say that while the security of the landlord for his capital was something to admire, that of the tenant for his capital was something to deplore (Hear hear). He had suffered from the working of the existing law on more than one occasion. In one instance the landlord had put in a claim for three years' rent, swept off everything from the farm, and left the other creditors without a farthing. He would propose as an amendment to substitute "One year for two years in Mr. Hodges's resolution."

Mr. SMYTHIES seconded the amendment.

Professor BUND thought the question was almost too large to be discussed by the Council at that stage. To talk of repealing the law was to talk of repealing 30 or 40 different Acts, involving questions relating to mortgages, taxes, tithe-rat charges, and a variety of other matters; in short, almost every branch of real property law. He admitted that a case had been made out by Mr. Hodges for some alteration of the law. It seemed hard that if another man's goods were found on a farm they should be taken for rent. The old Law of Distress with regard to dwelling-houses had been found to work with some severity in that respect that an amendment had to be made in it; and what was wanted in the present instance was an extension of that alteration to agricultural tenancies, though he foresaw much practical difficulty in carrying it out. Before arriving at any conclusion the Council should consider the subject in all its bearings, at the same time remembering that they had not always to deal with honest traders, but had sometimes to deal with persons who lived from hand-to-mouth, and were endeavouring to evade the claims of their creditors. As to limiting the priority to one year, he would remind them that most landlords allowed a margin of time for the payment of rent after it fell due, and if the time were limited absolutely to one year, probably more harm than good would be done to the tenant. With regard to the landlord's being a preferential creditor, he was placed in that position because he could not sue for his rent until it was due. He might have to stand by for six months and see his tenant sell off everything on the farm, so that by the time the rent was due little or nothing was left to distraint upon. He could not, therefore, be in the same position as an ordinary creditor, and necessarily wanted some special protection. He trusted it would not go forth from the Council that they were embarking on a crusade against the Law of Distraint, for he felt that they were not sufficiently informed to pronounce more than a general opinion on the subject.

Mr. D. LONG contended that the present law was injurious to the farmer, inasmuch as it encouraged competition for farms.

Mr. LIPSCOMBE said, as it was his lot to be an agent for large estates, he looked at the question from the landlord's point of view; though he hoped not illiberally, for he was in favour of reducing the six years to two. Great injustice might be done alike to landlord, tenant, and creditors by an abuse of the principle of preferential credit; but they must not overlook a state of things which was very common among the great majority of farms, and especially small holdings, after bad seasons. If one year's rent were the limit of the landlord's preference it would be impossible for persons like himself to make that allowance for the position of a hard-working industrious farmer which was due to him at such periods. The limit should be made at least two years. To such an alteration he was prepared to give his support, and he did not see any insuperable difficulty in making such an amendment. With reference to property on a farm not belonging to a tenant distrainted upon, he remembered a case in which a lawyer-agent seized from 20 to 30 head of cattle which had been placed in a park only two days before for agistment. That was a wrong.

If the recommendation in the second resolution were confined to live stock, that would meet the necessities of the case; but it would be dangerous to apply the rule to farm implements and other dead stock.

The CHAIRMAN in reply to Mr. Arkell, replied that only two or three resolutions on the subject had been sent up by local chambers, including the following from the Warwickshire Chamber:—"That the power of distraint be limited to a shorter time than the present law, and that reasonable permission should be made for the protection of the owners of agistment stock."

Mr. P. PHIPPS, M.P., was entirely in favour of the principle of limiting the right of distraint to one year's rent. It would be unjust to the landlord if a preference were not given to him to that extent, seeing that under the Agricultural Holdings Act, where it was in operation, [A voice—"Where?"] the land was let subject to one year's notice, and the landlord could not at any time, like an ordinary creditor, ask for payment, but only on fixed days. If beyond the limit of one year a landlord were inclined to be generous with a tenant, let him be so with his own money, and not with that of other people. He had known cases in which the present law of distraint had inflicted great hardship upon the tenant's ordinary creditors to the advantage of the landlord, and the operation the Law of Bankruptcy showed that, in the eye of the law, the limit of one year was reasonable and just.

Mr. JAMES TURNER maintained that any alteration of the Law of Distraint would act prejudicially to instead of beneficially for the tenant-farmer. By reducing the term for which a landlord might give credit to his tenant they would make him more determined to enforce the payment of rent exactly when it became due.

Mr. LLOYD also thought that in the interest of the farmer, they should "leave well alone." If once the law were altered in the direction proposed by Mr. Hodges, a sharper practice would be introduced in enforcing the payment of rent, which would be very injurious to tenants.

The CHAIRMAN observed that, neither the resolution nor the amendment proposed to repeal the law, but merely to limit the landlord's right of distraint. That the question was a delicate and difficult one was clear from the discussion, but he was himself in favour of a measure which would have the effect of bringing more directly together, face to face in harmonious contact, the landlord and tenant (Hear, hear). His experience of the Law of Distress was chiefly derived from Scotland, where it was called by the crack-jaw name "Hypotheec," and where he hardly heard of anything else morning, noon, and night (laughter). There the real effect of the law had been to keep landlord and tenant apart, the landlord sleeping at ease and not troubling himself to look after the tenant. He did not see how the Council could commit itself to the resolutions of Mr. Hodges without more matured consideration. He would not like to commit himself either to one or two years, but there could be no doubt as to the necessity for a modification of the law, especially as regarded the right of the landlord to seize property which did not belong to the tenant (Hear, hear). He would suggest that the Council should content itself with passing some general resolution declaring that the Law of Distress required amendment.

Mr. HICKS (the newly-elected M.P. for Cambridgeshire) deprecated the Council's coming to any decision on the resolutions before it. He had before observed that the feeling of the Council was that the covenants between landlord and tenant should be made as wide as possible, but if they carried these two resolutions they would be going in the opposite direction ("No, no"). Well, that was his opinion. If the landlord's right of distress were limited to one year, or even to two years, he must never let the tenant get half-a-year in arrear ("Oh!" and "No!"); or let the half-year go by; for if he did, the moment the clock struck and the rent became due, the tenant could go on for two years more, and the landlord's power was gone. He did not see any use in going beyond a three years' limit, which would embrace the period for giving notice under the Agricultural Holdings Act; and under certain conditions an arrangement might also be made for the introduction of stock, belonging to other persons than the tenant, in a way that would be both profitable to the tenantry and advantageous to the landlords.

Capt. CRAIGIE reminded the Council that that was the first time the law of distress had been discussed by the Council, and said he should regret their pledging the Chamber



definitely to resolutions so "crisp" as those before them. Up to that moment only two or three local Chambers out of the fifty odd in England had expressed an opinion on the subject. Perhaps they might adopt a resolution to the effect that a *prima facie* case had been made out for shortening the period.

Mr. HODGSON, President of the Warwickshire Chamber, after citing the resolution passed by it (given above), expressed his belief that if a resolution couched in such general terms had been proposed that day it would have met with unanimous assent. As it was not before them he should support, as the nearest to it, the resolution moved by Mr. Hodges.

The CHAIRMAN said an opportunity might be given for moving the Warwickshire resolution.

Mr. CALDECOTT, at whose instance that resolution was carried unanimously in the Warwickshire Chamber, said he was prepared to move it if the amendment were withdrawn.

Mr. Mansfield and his seconder then withdrew the amendment, and Mr. CALDECOTT proposed and Mr. HODGSON seconded the Warwickshire resolution, viz.:—"That the power of distraint be limited to a shorter time than the present law, and that reasonable provision should be made for the protection of the owners of agistment stock."

Mr. HODGES, in withdrawing his resolution, observed that his object was not revolutionary, but simply to put the law on a more satisfactory footing.

The resolution of the Warwickshire Chamber having thus been substituted for the original motion, was then put from the chair, and agreed to without a dissentient and amid cheers, the Chairman observing that it fairly represented the feeling of the Council.

Mr. CALDECOTT moved the following resolution on the Coroners' Bill, which had also been passed by the Warwickshire Chamber:—"That this Chamber objects to the main points of the Coroners' Bill, introduced by Mr. Cross, the Home Secretary, at the last Session of Parliament, for the consideration of the country during the recess, as it retains the permanent charges on the county rate, and in no case remedies the objectionable mode of appointment or the means of dismissing the Coroner."

Professor BUND seconded the resolution, and Mr. LLOYD supported it, and after a few remarks from the Chairman it was adopted.

On the motion of Mr. STRATTON the County Government Bill was ordered to be taken first at the March meeting of the Council in the event of its having been laid before Parliament in the interval.

Mr. D. LONG suggested that as this country could not continue to face hostile tariffs with free imports, the Council should at an early period discuss the mischievous results of political economy or so-called free trade, as affecting the encouragement or discouragement of agricultural production in Great Britain.

On the motion of Capt. CRAIGIE, seconded by Mr. BELL, the Council declined by a unanimous vote to place such a notice on the paper.

At the adjourned general meeting of the Chamber, held after the Council meeting, Mr. WILLSON made his Report on the financial state of the Institution, having been prevented from doing so by illness in December. The balance-sheet having been already published, Mr. Willson now reported that there was but a comparatively small number of subscriptions in arrear, and stated that on the whole the Chamber was in a better position financially than it was in the corresponding period of the previous year.

The proceedings terminated with a vote of thanks to the Marquis of Huntly as the Chairman.

### LINCOLNSHIRE.

The annual meeting and dinner of this Chamber was held at Lincoln a few weeks ago, the Marquis of Ripon, K.G., presiding. The annual report and statement of accounts were taken as read, and ordered to be printed. After the re-election of members of the Council and a reference to the opening of a branch Chamber at Spalding, making the sixth branch in connection with this important organisation, the secretary (Mr. S. Upton) presented a resolution passed by the Grantham Branch Chamber, as follows:—

"That in consequence of the depression of agriculture having reached so serious a crisis, the time has arrived when

Chambers of Agriculture should take such action with reference to the partial incidence of free trade as shall enable members to express their opinions, in conjunction with county representatives, upon the expediency of urging upon the Legislature the necessity of considering the effect of an absence of reciprocity and the present unsatisfactory state of the law by which imported articles connected with agriculture are brought into unequal competition with home productions."

The Noble CHAIRMAN thought the question raised by the resolution was one of very great importance, and one well worthy of discussion. He therefore suggested that the resolution be considered at a subsequent meeting, and that notice be given on the agenda paper.

This was agreed to, and Mr. W. Pinder engaged that a member from the Grantham branch should introduce the question.

Mr. W. H. WHEELER, M.I.C.E., of Boston, then read a long and exhaustive paper on the rainfall, water supply, and drainage of Lincolnshire. The great and pressing question of how to avert the periodically recurring floods which cause such loss in the valley of the Witham was the main topic of the paper. Mr. Wheeler differed from the costly plan proposed by Sir John Hawkshaw, and advocated that more economical one put forward by Mr. Williams in a report furnished by him to the Witham Commissioners. The removal of every obstruction to the natural flow of the water, the commencement of such work at the lowest point of the river next the sea, and the gradual progress upwards towards its source, the fixing of the shifting sands which impeded the progress of the water at the mouth of the river, and the clearing away of clay and other earthy obstructions, and the enlarging of the capacity of the grand sluice in the most economical manner possible, and removing the forelands, were amongst the chief of Mr. Williams' recommendations. In return for an expenditure of about £100,000, and by the separation of the high land from the flood drainage as far as possible, there would be no further fear of any flooding, either in the city of Lincoln (which suffered so much two years ago) or in the fen lands below. To carry out such a scheme effectually it was necessary to sweep away the seventeen sets of drainage commissioners which at present existed, having jurisdiction over the Witham between Grantham and the sea, and in accordance with their report of the Lords' Committee, to establish one conservancy board. The proper conservancy of rivers was a national question, and in order to raise funds, the proprietors on the high as well as the low portions of the watershed should be included in the scheme by means of a permissive measure.

The annual dinner was afterwards held at the Saracen's Head Hotel, the Marquis of Ripon presiding.

Mr. CHAPLIN took occasion prominently to direct attention to the introduction of pleuro-pneumonia from America, and pressed for the immediate enforcing of the law of slaughter at the ports if farmers and stockowners were not to be exposed to new losses.

HOW A LUXURY IS PRODUCED.—Geese-cranning, with a view to the ultimate manufacture of *pate de foie gras*, is on the increase, and it is said that there are 250 people engaged in the business at Strasbourg, in which city this strange branch of industry has thrived for more than a century. Everyone knows that the process of inducing an unnatural enlargement of the bird's liver is one that entails considerable suffering upon the goose. The average amount of food required to bring each bird to the proper point of perfection, or rather of disease, is estimated at 30lbs. The chief point in view is the development of the liver at the expense of the rest of the carcass, and to this end antimony is added to the solid food, and the gravel and vegetable charcoal to the water. The value of a goose is increased four-fold and six-fold by this method, for while the flesh of the bird is worth but about 7d. a pound at the best of times, the same weight of the liver will sell for as much as 5s. or even 10s. The manufacture of the famous Strasbourg *pate de foie gras* lies at present in the hands of 23 persons, whose joint yearly income from this source is returned as £75,000, besides which the flesh and fat of the geese which yield the required amount of liver realises a further sum of £20,000.—*City Press*.

## AGRICULTURAL DEPRESSION.\*

By general consent the agricultural interest in Great Britain is admitted to be at the present time in a condition of depression. Landlords feel it through the difficulty which they experience in getting their rents; bankers know it by the incontestable evidence of overdrawn accounts; and tradesmen suffer from it in the diminution of sales and in the postponement of settlements. Nor is the crisis at all of the nature of a surprise. On the contrary, it has been slowly approaching for the greater part of the last ten years, and rapidly for the last four. At least this has been the case in the corn-growing districts of England. In pastoral districts the depression is of recent date, and even now is much less serious than where the land is chiefly arable. Thus Scotland, which depends less on corn-growing than England, has suffered less, while Wales and Ireland have, until quite recently, scarcely suffered at all. Seasons which are unsuitable to cereal crops are generally propitious for the growth of grass and roots; and although the frequent failures of the potato crop have caused ruin to many Scotch farmers, and the prevalence of cattle disease up to a comparatively recent date has been a serious matter to stock-farmers, the heaviest losses have fallen upon those who look to their corn crops as their chief source of profit.

In all branches of farming, with the exception, perhaps, of stock-breeding (and it is to be borne in mind that there are comparatively few farmers who are breeders solely), the generally high range of rents, which were adjusted to more lucrative conditions of agriculture than now prevail, is being sharply felt. That rents will have to come down, at least until the conditions of land tenure by which farmers are now so seriously handicapped in their competition with foreign producers have been materially altered, I have not the slightest doubt. The increase in the burden of local rates, again, is universally complained of. Within the last twenty years it has been enormous. If space allowed, the truth of this assertion, if any one doubts it, could be made evident by statistics; but it is sufficiently evident to be left unsubstantiated by figures. Some political economists tell us that local burdens fall on landlords, and not on tenants. But as Mr. Cliffe Leslie has well said in the January number of this Review, "It cannot be foreseen whether a trader will ever recover a so-called indirect tax at all: it may be a direct tax on himself, may drive him and all other small capitalists from the business, &c." The same argument applies to an indirect rate. It is obvious that a leaseholder pays all increase of local burdens up to the end of his term. As for the yearly tenant, he knows that he pays the increase, and he can never be certain that his rent would have been advanced to a proportionate extent if the increase had not taken place. If land is, as many say, not only not too highly taxed but not taxed enough, the rates should be levied, at least in part, on the owners, and not entirely on the tenants. Assuming that rates are partially paid out of the pockets of tenants, it is unjust in the extreme that the farmer should be charged five, and often ten times as much for the purposes of local government and poor relief as the private gentleman, professional man, manufacturer, or tradesman enjoying an income at least equal to his own, who resides in the same parish. Lastly, though not least, the over-preservation of game has in very large districts led to the ruin of tenant-farmers.

In order to show how generally and keenly the agricultural depression is felt in almost all parts of the country, I will now quote from some returns which I am still in course of receiving from every county in England and Wales. It will be remembered that at the opening session of Parliament, Mr. Bernhard Samuelson gave notice that he would move for a Select Committee to inquire into the operation of the Agricultural Holdings Act, and the condition of agricultural tenancies in England. At his request I sent out a large number of circulars to farmers, land agents, and a few land owners, with a view of obtaining information on various points connected with the subject of the proposed inquiry. Amongst the questions asked was this: "What is the present condition of the farming interest in your district?" The returns have not nearly all come in at the time of writing this paper; but

there are sufficient to enable me to give, in their own words, replies from correspondents residing in each of the English counties:—

*Bedfordshire*: "Exceptionally bad: Farmers are losing heart, and the land is in a much worse state than formerly." "Farmers generally have been losing money for the last four years." "During an experience of between thirty and forty years I have not known anything like it. There has been a serious inroad upon capital account during the last few years, and the land has seriously gone back in cultivation." "In a greater state of depression than I have known it for twenty-five years past. A good deal of the tenant's capital has been lost. The condition of the land has sunk; farming has altogether gone back during the past five years, and it will require some years of prosperity to regain lost ground."

*Berkshire*: "Bad," and "Very bad indeed." *Buckinghamshire*: "Generally it is in a very depressed state." "Very much depressed. This is a grazing district to a great extent, and our graziers, in many instances, have lost all their year's rent." *Cambridgeshire*: "As bad as can be." *Cheshire*: "Not good." "Not as good as usual." *Cornwall*: "Great complaints with the generality of farmers." "The farmers of Cornwall are not so well off as they were two or three years since; but, owing to the mixed system of husbandry, the bad times have not been felt so much in Cornwall as elsewhere." "Not so bad as in districts depending almost entirely upon the growth of grain." "In a very depressed state." "Dull." *Cumberland*: "Fair." "Very bad." "The last season has been a good one; but the present prices are not satisfactory, and the general depression in trade is now having its influence upon farming." "Complaints to any extent." "Generally satisfactory." *Derbyshire*: "Taking an average of the last seven years I think there is no occasion to complain. Our district is nearly all grazing and stock-breeding." "In a depressed state; but, this being principally a dairying and stock-breeding county, we have not suffered to the same extent as where the land is chiefly in tillage." "Very bad." "Much depressed and fearing worse, but not so bad as in arable districts." *Devon*: "Very depressed." "Very great complaints." "Very unsatisfactory and unremunerative." *Dorset*: "Bad, and getting worse." *Durham*: "Not so bad as where there is more tillage." "Depressed." *Essex*: "Very bad; was never worse." "Bad; it is impossible to be worse." "Farmers suffering from low prices, general depression of trade, and the rise in wages." "Bad; the work all round is carried on languidly, and year by year the condition of the land is becoming poorer." "Much the same as heretofore." "A large quantity of the land very badly farmed." "Lamentably bad." *Gloucestershire*: "Very great complaints are made, especially by the large clay arable land farmers." "Never worse." *Hampshire*: "This being a stock district, where there is a full stock kept up, the farmers have done fairly. On the large poor farms I infer that farmers have done badly." "Worse than has been the case during my experience of forty-four years." "By no means favourable." *Hertfordshire*: "Ruination." "Bad; and many tenants inevitably come to grief." "The farming interest could not well be in a worse condition than it is." "Very favourable compared with many other districts." *Herts*: "Depressed, but not to the same extent as in many other districts." "Very bad." "Very bad indeed." "I do not know that greater depression ever existed amongst the agriculturists of this country." *Hunts*: "Very depressed." "Very bad on the heavy clay farms." "Never in a more depressed condition." "Very Bad." *Kent*: "Depressed." "The past season has made a very poor return; but we have been fairly prosperous up to last year." "In a very bad state." "A very poor one." "Very depressed, and farming not so good as twenty years ago. More weeds grown last year than I ever saw before." "Bad; but I think on the whole I have known it worse." "Much depressed." "Very bad; worse than at any time during the last twenty years." "Depressed, in consequence of a succession of indifferent yields, high-priced labour, and increased rents." *Leicestershire*: "Above general average." "No particular complaints, upon the whole." "As a whole, the farmers of this district are doing fairly well, the season being abundant for grass, hay, grain, and potatoes." "Depressed." "Fair average." *Leicestershire*: "Greatly depressed." "Generally, though not in all cases, a deficiency in the crops which causes considerable complaint." *Lincolnshire*: "Very bad; not been so bad since

\* Extracts from a paper in the *Fortnightly Review* for February, by William E. Bear.

1851." "Very much depressed." "The greatest depression, and the fear of catastrophe to come." *Middlesex*: "Very unsatisfactory." *Monmouthshire*: "Bad." "Thoroughly bad; land going out of cultivation, stock reduced in quantity, only necessary work done, and many have great difficulty in meeting payments." *Norfolk*: "Not by any means satisfactory, but as much so as in many other districts." "From bad to worse." "Very bad." "Depressed; but, I do not know that the distress hereabouts is as great as generally represented." "Bad." *Northamptonshire*: "Very much depressed." "Bad." "Very good generally; but the results of the last two seasons will not supply means for substantial improvements." *Northumberland*: "Capable of much improvement. An immense deal of land producing nothing—I may say, simply out of cultivation." "Very much depressed." *Nottinghamshire*: "In a very depressed condition. To take a radius of three or four miles from where I sit, there are, to my own knowledge, two or three thousand less sheep than there were five or six years ago." "Very much depressed." "Bad—four or five bad seasons." *Osfordshire*: "Very bad. Small farms being absorbed by large ones. The land is very foul and poor, partly from the continuous rains and the shortness of stock. Traders complain that farmers do not pay them." "As bad as can be imagined." "After forty years' experience as a farmer I never knew it so bad." *Rutland*: "As bad as possible." *Shropshire*: "Very bad. Very few of the farmers, if any, paying their way." "Island-to-mouth farming." "Very bad." "During the last year or two the condition of the land has gone back very much; but this being a stock district, we still fare better than farmers in some other districts." *Somerset*: "Losing money. Cheese twenty per cent. lower than last year, meat lower, and hundreds of fat cattle selling below cost price." "In a very depressed state. The tenants of poor lands, are giving up as fast as they can, many being compelled to do so." "The farmers are all complaining; but this is generally occasioned by deficiency in the corn crops and the bad price of wheat." "Very bad indeed, having had three or four disastrous seasons." *Staffordshire*: "I think farmers are all losing money." "Depressed." "Never known to be worse. No farm for the last three years has paid rent and working expenses. Many farmers ruined." *Suffolk*: "In a most depressed state. Four unprofitable years have succeeded each other, and many farmers have failed or are in a state of insolvency." "Very much depressed in all inferior, game-infested, and high-rented districts." *Surrey*: "I never knew it worse, if so bad." "Anything but satisfactory." "I should say farmers generally are losing money." "Much complaint, and many who have farms would be glad to give them up, were they not holding on lease; but in the present state of agricultural depression they cannot get any one to take them off their hands." "As bad as can be." "Depressed." *Sussex*: "In a depressed condition. The condition of the land has certainly gone back during the last two or three years." "In the most depressed condition. Not only does corn-growing pay nothing, but the grazing land, of which there is a good deal in this neighbourhood, has paid nothing this summer. The stockmasters have had the best time; but they grumble." "Bad as to profit." "Not so depressed as in many districts." "Very indifferent." "I do not think the depression is so very general or great in this district as in many others." "Most depressed." "Bad. The land generally is not so clean or so well cultivated as it was a few years since. Men of capital are getting out of business, there being neither pleasure nor profit in farming at present." *Warwickshire*: "Bad." "Unmistakably bad." "As bad as can be." *Westmoreland*: "Satisfactory." "This being chiefly a grazing district, the agricultural interest is generally very fair." "The farming interest has suffered a serious check the last two years." *Wiltshire*: "Bad condition." "Very bad." "Farmers about here are generally substantial men, and, though times are not good, I do not hear very much complaining." "There never was so much complaint as at the present time." "Very much depressed." "Very bad; and the land generally in a much worse state of cultivation than ten years ago." *Worcestershire*: "Very bad; on the stiff clay lands fearful." *Yorkshire*: "I do not believe that this will prove a bad year to farmers who have farmed well and have ample stock." "In a state of melancholy and despair." "Less depressed than elsewhere, grass and tillage land being well proportioned, and the farms of moderate size—from one hundred to three hundred acres."

From Wales but few returns have come in at the time of writing, but those that have arrived are generally less unsatisfactory than the returns from English counties, as a whole.

It will be noticed that in several instances diverse statements came from the same county. This was to be expected, as the quality of the land and the nature of the farming are quite different in various parts of the same county. No selection has been made, but every reply, or the important portion of it, received up to the time of writing, has been given. The only conclusions which, I think, can be fairly drawn from these replies are—(1) that the agricultural depression is very generally and keenly felt; and (2) that it is felt least in pastoral districts. When the returns are complete, it is possible that a careful examination of the replies to the question quoted above, in relation to replies to other questions also answered in the schedule, and to the agricultural conditions known to prevail in the various counties, might teach some useful lessons. Such an attempt, however, would be encompassed by difficulties and perplexities, because the disturbing circumstances are so multifarious and so intricately grouped. For example, one county or district may have suffered more than another because it contains a larger proportion of arable land, or heavier land, or because rents or wages are higher, or game is more strictly preserved, or no large town is near, or there is less freedom of cultivation and sale of produce, or farm covenants give less encouragement to the expenditure of capital; while in several instances two or more of these influences may have been in combination or in opposition.

On the whole, the result of feeling the pulse of the country, as I have been able to do by the collection of these returns, has been to confirm the impression which I had previously entertained, namely, that the present agricultural depression is more general and severe than any which has occurred since the period which immediately preceded and succeeded the year 1834, when the new Poor Law came into force. At that time a large quantity of land had gone out of cultivation, owing to the pressure of the rates, which, under the old Poor Law, amounted in some parishes to more than twenty shillings in the pound. In 1835 and 1836 there was very great distress in the agricultural districts. In the former of these two years the imperial average price of wheat was only 39s. 4d. per quarter, although the duty on foreign corn under the sliding scale of the Act of 1828, which was still in force, must have been entirely prohibitive, as it would have amounted to not less than 47s. 8d. per quarter; and colonial wheat, for which the duty was comparatively low, came in such small quantities as to be unworthy of notice. In 1851 the price of wheat reached the still lower average of 33s. 7d. per quarter—the lowest it has ever been since 1780—and in 1852 it was only 41s. The harvests, however, were much better than those of recent years, and, although there were great complaints, the depression was neither so general nor so widespread as it is now, and farmers were able to hold on till relief came in 1853, when the price of wheat rose to 53s. 3d., followed in 1854 by an increase up to 73s. 7d. per quarter. Here, as throughout this paper, in speaking of the agricultural depression, I refer to the condition of the farmers only. If the condition of the farm labourers were under consideration, the years 1839 and 1840, when bread was almost at famine price, and incendiarism was rife, would stand out as a period of general distress.

What makes the present crisis in the agricultural interest more distressing than any that have preceded it, is the general despair with which our escape from it, at least without the ruin of a large proportion of existing occupiers, is regarded. Never before have farmers been subjected to such severe competition in all the branches of their business as they now have to encounter. On the continent of America the production of corn is constantly increasing, and the surplus of a good crop there is alone sufficient to supply all our requirements. Another source of supply has recently been opened in India, whence in 1877, for the first time, the importation was very large. The resources of the enormous breadth of fruitful land in that empire are almost illimitable, and only await full development. With such development the cheap labour of India will render her a formidable competitor to America as a wheat-exporting country, even if she does not, as some think she will, drive her rival out of all foreign markets.

The importation of live stock and meat, too, has greatly increased within the last few years. From the Americas

continent especially we have recently had large importations, and these are certain to increase enormously when the American and Canadian farmers have more extensively stocked themselves with such cattle as are qualified to produce the first-rate meat which alone it pays to send to this country. Cheese, again, comes in ever-increasing quantities, while butter may almost be said to be manufactured from anything rather than the milk of the cow. Poultry, eggs, and even hay and straw, are also now coming from foreign countries in quantities never dreamed of a few years back. Thus it seems inevitable that the tendency of prices for every thing that the farmer produces will be towards a reduction. At the same time, the cost of production is greater than it ever was before.

Will British agriculture, then—the finest in the world—permanently decline? I believe it will, unless the conditions under which it is carried on are fundamentally changed. At present, British farmers are handicapped in a dozen ways. In no other country in the world are the producers of food so much hampered in the conduct of their business by artificial impediments. Give them an equal chance with the producers of foreign and colonial countries, and they will maintain their position of pre-eminence in the march of agricultural enterprise. The soil of this country is by no means naturally the most fruitful, yet our average yield of wheat per acre is greater than that of any other country; while in the production of live stock of all kinds, in proportion to area—taking weight as well as number into consideration—we are also ahead of the whole world. The average yield of wheat for the United Kingdom, according to official estimates, is  $29\frac{1}{2}$  bushels per acre, while that of France is  $16\frac{1}{4}$ , that of Austria  $12\frac{1}{2}$ , that of Russia  $5\frac{1}{2}$ , and that of the United States about  $12^*$ . With respect to barley, the proportions are very nearly the same. Holland alone beats us in her average produce of that grain, as she closely approaches us in the yield of wheat, and Belgium comes next. In the production of meat these two countries are the only ones which rival us in proportion to area, and we beat them both in the weight produced. Yet, in spite of this pre-eminence, it has been estimated by good judges that the agricultural produce of the United Kingdom might be doubled if the resources of the soil were developed to the utmost extent.

Why should the British producer of wheat, if he were fairly circumstanced fear the competition of the American farmer? It has been estimated that the cost of transit gives the home producer a natural protection of 40s. per acre, at least equivalent to the average rent of the wheat-growing land of this country. It costs from 4s. 6d. to 6s. 6d. per qr. to send wheat from New York to London; and, beyond this, there is the expense of inland transit to reckon, as well as the profits of exporters.† Indeed, it is simply marvellous that American farmers can afford to grow wheat to send here at such price as have prevailed during the past autumn and winter, considering the small yield of their crop. In the older States it is admitted that the land has been so much exhausted as to render the remunerative production of wheat almost impossible; while in such young States as Illinois, Iowa, and Wisconsin, the average yield is only 8, 10, and 13 bushels per acre respectively—quantities which it would not pay the British farmer to grow, if he had his land rent free. American exporters must have lost heavily on wheat sent here during the past season, as on several occasions the price has been higher in the American than in the English markets.

It will take a long time for America to acquire capital enough to expend on such a comparatively elaborate system of farming as prevails in our own country; and as long as she has virgin soils as yet to occupy it is not likely that her farmers will make the attempt. Labour is dearer in the United States than it is in the United Kingdom, and I do not believe that the former country can compete with the latter in what may be termed the artificial production of corn. Still it is a fact that, with wheat at an average price of about 40s.

(\*) The official estimate of 1874 was, for the United States 12.3, and for California, given separately, 15; but the harvest of 1874 was an unusually prolific one.

(†) The supposed natural protection of 40s. per acre for British farmers is based on the rough estimate that they grow nearly 4 qrs. per acre, and that American wheat costs over 10s. per qr. to bring here. As at the present time the through freight of wheat from Chicago to London is about 10s. per qr., the estimate does not appear to be an exaggerated one.

per qr., America has sent us very large supplies. It is no probable that the farmers of that country will give up growing wheat for exportation as long as our minimum rate here is about 40s., while, in the majority of seasons, the average price is considerably higher. All that I contend for is, that American competition is not likely to bring the price down below 40s., unless in very exceptional years because it seems impossible for the growers to send it here at a lower price for any considerable length of time; and the same remark applies to Canada, New Zealand, and Australia. What complications the development of the agricultural resources of India may hereafter produce it is impossible to say. At present the produce of that country is very uncertain; and, for a time at least, we may leave the possibility or any very great disturbances of our markets through an increased supply from India out of the question. America is now, and is likely to be for some years to come, the great rival of Great Britain in corn-producing, and the difficulty which British farmers have immediately to face is, how to grow wheat to sell at 40s. per qr.

On the other hand, in a sparsely-occupied country like America, there are almost boundless facilities for the production of cattle and sheep. It would be a curious anomaly, illustrating the paradox, "Nothing is certain but the unexpected," if by-and-by we should discover that we can beat our trans-Atlantic friends in the production of corn, which is now regarded as unremunerative, while in our at present most valued industry, the breeding of live stock, they can supply us at a lower rate than we can produce for ourselves. The cost of transit is at present great, and I do not pretend to be a prophet, but more unlikely contingencies than this have come to pass.

After giving reasons for concluding that rents must come down for a time, at any rate, the writer proceeds:—It is not by any cheese-paring economy in the cost of living, the wages of labourers, or even the amount of rent, that the threatened decline of our agriculture will be averted. These remedies are necessary as temporary expedients to stave off an immediate catastrophe; but they will not tend to promote increased production, which is the true and permanent means of restoring prosperity. On the contrary, their effect will be in the opposite direction. Indeed, low rents, low wages, and retrenchment are incidents of a depressed condition of agriculture. If the business of farming can again be made profitable the demand for land and labour will once more increase, and farmers will also have more money to spend upon superfluities. The quickness with which agricultural prosperity may be restored depends upon the means that may be taken to attract capital to farming—not only to replace what has been lost in recent bad seasons, but to increase the amount invested far beyond any that has previously been devoted to similar uses. On all sides it is admitted that the condition of the land of the country generally is much poorer than it was a few years back. Farmers have lost capital, and have consequently had less to spend in improvements, or even, as I have said, in keeping up the usual standard of fertility by feeding a sufficient number of live stock. It must be a work of time merely to restore what has been lost, and a further period will be required to make an improvement upon the old state of productiveness. In the meantime, rents and labour must be low, unless in the case of the latter the demand in other branches of production should force farmers to pay more than they can afford. But the removal of the existing impediments to agricultural investment would rapidly show its effects, and the continuance of the present depression depends to a great extent upon the promptness and thoroughness with which the required reforms are initiated. At first sight it may seem anomalous to advise the investment of more capital in what is admitted to have been a losing business; but there is no anomaly in reality. The farmers who are now in the most critical position are notoriously those who have been farming in a poor way an area of land too large for their capital. Land that is kept constantly in a high condition of fertility will grow good crops at a smaller expenditure than is required to force comparatively small crops from an exhausted soil. In other words, when land has once been brought to a high state of productiveness, only a small annual addition of fertilising material is requisite to keep up its condition; but when it has become exhausted, a small yearly expenditure upon it fails to force from it remunerative crops. Thin crops mean foul crops,

and there is nothing so deleterious to the productiveness of land as the growth of weeds. Thus a small crop has often cost more to produce than a large one. The ploughing, sowing, and cleaning are more laborious and consequently more costly, and the harvesting often costs nearly or quite as much, while the miscellaneous expenses of the farm, which have to be distributed over the acreage in due proportion, have been as heavy in the case of the small produce as in that of the large one. The rent in the latter instance may have been higher, and the cost of dressing and sending out a large bulk of corn is of course more; but this difference is made up for by the advantages previously mentioned, leaving the surplus received for the extra produce to be set against the interest on capital sunk in the land. Apart from the preliminary investment of capital, the cost of growing ten sacks of corn on land of given quality is little if any greater than the cost of growing six sacks upon it. A great deal of discredit has undeservedly been thrown upon high farming by the injudicious expenditure which has often been made—chiefly by amateur farmers whose zeal for agricultural improvement has been greater than their knowledge of the business in which they have embarked for the pleasure of it. Nevertheless, it is certain that farming which is at once high and skilful pays best. It is not only in the production of larger crops that the farmer who possesses abundant capital has an advantage over his poorer neighbour; he has another in the greater number of cattle and sheep which he keeps on an equal acreage, and often with very little extra expense, because he consumes what his neighbour wastes. An immense quantity of cattle food is annually wasted through the inability of poor tenants to purchase sufficient live stock to consume it, or to purchase the animals at the right time. Turnips are often left standing and exhausting the soil, long after they should have been fed upon it to its fructification, and the same may be said of other feeding crops, including grass. Thus in all ways the farmer whose capital renders him master of his business has the advantage over his poorer brother whose business may be said to be the master of him.

Concentration of capital is the great thing needful for agricultural prosperity, and this is precisely what the laws and customs relating to farming have in almost every imaginable way discouraged. The subject is a trite one, and yet I must briefly state these discouragements once more.

1. The laws which allow land to be tied up in the hands of limited owners, whose interests are directly opposed to the expenditure of their own capital on their estates, and which render transfer difficult and costly, obviously discourage the concentration of capital on land. This part of the subject has been enlarged upon by many able writers, and it is therefore as unnecessary as it would be impossible, with due regard to the space at my command, to do more now than simply mention it.

2. The condition of the law which enables landlords to confiscate the property of their tenants invested in the land, still more seriously than the first-named impediment, hinders the concentration of capital in farming. It has been previously stated that high farming pays best; but unfortunately it does not always pay the farmer. Too often the landlord reaps the greater part or the whole of the benefit, by appropriating the improvements of his tenant, either by means of an increase of rent, or by simply keeping what the law allows him to retain without compensation when the tenant quits or dies. So scandalous had this abuse become that in 1875 Parliament passed the present Agricultural Holdings Act, with the professed object of removing it. That measure, however, besides being faulty in many of its details, has failed to come into force to any appreciable extent on account of its permissive principle. In an article published in this Review in May, 1875, when the measure was under discussion in Parliament, I gave reasons for believing that it would be a failure unless first altered and then made compulsory. That the views then put forward were justified, the history of the Act sufficiently shows. When the day arrived for the measure to become operative in the absence of notices against it, the owners of land throughout the country, from the Crown downwards, with very few exceptions—and these chiefly through inadvertence—placed their veto upon it. It was hoped that if the Act failed to be accepted, its indirect effect in promoting private arrangements for liberal covenants between landlords and tenants would be considerable; but here, even, there has been disappointment. Neither directly nor indirectly has the Agricultural Holdings Act produced

any effect upon the conditions of agricultural tenancy, except in a very few instances. The returns from which I have already quoted, referring as they do in part to the operation of the Act, fully bear out this statement.

3. The Game Laws occasion waste, and prevent the application of capital to the land by landlord and tenant alike.

4. The prevalence of cattle disease has occasioned heavy losses to landowners and farmers in the past, and the liability to such losses greatly checks enterprise in breeding and fattening live stock. The Cattle Diseases Act of last session is an improvement on previous legislation for the prevention of disease, but falls short of being a completely effective measure.

5. The laws of distress in England, and hypothec in Scotland, must be charged with hindering the application of capital in farming. By protecting landlords at the expense of other creditors these laws have the effect of placing land in the hands of needy speculators, who cannot do justice to it, to the great disadvantage of men of capital who, having something to lose, are outbid by their reckless competitors.

6. The manner in which local taxation is at present levied discourages the liberal application of capital to land, and the question whether land is, on the whole, taxed at too high or at too low a rate does not affect this fact. In my opinion, however, the importance of local taxation reform has been greatly exaggerated. Instead of giving it the foremost place in the programme of agricultural reforms which it is within the province of the Legislature to bring to pass, as many do, I should put it last.

7. The restricted covenants which are contained in most farm leases and agreements compose one of the most serious impediments to agricultural enterprise, and they are only mentioned last because they are not, like the hindrances previously noticed, within the province of legislation. But although Parliament could not render such covenants illegal without an undesirable interference with private contract, one effect of passing a compulsory Tenant Right Bill would probably be to sweep these objectionable restrictions gradually away. As soon as a system of compensating tenants on the one hand for their unexhausted improvements, and landlords on the other hand for deterioration of the land, had come into general use, there would be no further need or excuse for elaborate and vexatious conditions as to the rotation of cropping and the sale of produce. No proposed remedy for the existing depression in agriculture is so generally advocated in the returns before me as the removal of the swaddling clothes which encompass the British farmer.

Upon another occasion I may have more to say upon the probable effects of removing the impediments to agricultural development which I have mentioned. I do not say that the result would be to render farming profitable during a succession of very unfavourable seasons with prevalent low prices; but I do maintain that it would render farmers better able to endure such periods of adversity while they lasted, and more quick to recover from their effects when they were past. If not, we must sit down in despair and await the downfall of British agriculture.

We take from the columns of a contemporary *Punch's* "Epigram on a Prize Pig," which appeared in the first number of *Punch* for 1847.

"Here lies all that was eatable  
of  
A Prize Pig.  
He was born  
on  
February 1st, 1845;  
He was fed  
on  
Milk, Potatoes, and Barley Meal.  
He was slaughtered  
on  
December 24th, 1845,  
Weighing 20st. 9lb.  
Stop! traveller,  
And reflect how small a portion  
Of this Vast Pig  
Was Pork  
Suitable for Human Food!"

## COST OF WHEAT PRODUCTION IN AMERICA.

"Far West," writes as follows to *Beerbohn's Evening Corn List* :—

Seeing a letter in the *Times* of the 18th Jan., signed Arthur B. Savory, in which Mr. Savory enters with much intelligence upon the cost of production of Wheat in England, and the returns possibly realisable thereon by the British farmer; as also the important question whether the American grower can continue sending forward Wheat in the future at the low prices current for the past twelve months, I take the liberty of submitting to you the following which, though not so complete in detail as I should desire or as with more time for procuring the facts I should furnish, may yet be of sufficient interest to merit insertion in the columns of your valuable *List*; if so, I shall feel pleased. Briefly I submit

Average value per acre, Wheat districts—Canada, Indiana, Ohio, Michigan, Illinois, Kansas, Nebraska, Dakota, Iowa, Texas, and Wisconsin, £4.

Average production of ordinarily well formed Wheat fields, 3 quarters per acre.

Average cost of preparing land, seeding, cutting, threshing, and marketing, £2 per acre.

Interest at 6 per cent., being about 6s. per acre.

	£	s.	d.
Showing cost put free on railway cars at interior ... ..	0	14	9
Freight through to England and charges for selling ... ..	0	15	0
	1	9	9

delivered sold in England.

For the present the lands under cultivation are gradually losing their Wheat producing properties, through the exhaustive system of successive cropping without the necessary restorative of good farmyard or other manures; thus, the period has arrived on some so exhausted soils, and is impending on others, and this course of deterioration must continue until the great bulk of Western Wheat growing lands be likewise comparatively exhausted. The constantly new breaking up of virgin soils by the eager immigrant keeps out of view the deterioration and unproductiveness of the older cultivated lands; but the time must arrive in 20 years, but not exceeding 40 years at furthest, when all the best lands shall be occupied and on the waste respecting rich Wheat growing properties. Then the Western farmer will not have the rich treasure of a teeming soil to work upon, but must adhere to the approved methods of skilful farming. Casting a prospective glance upon the farmer, say 30 years hence, he may still be seen with the advantages of cattle raising and other live stock for European markets, enabled to till his soil depositing rich farmyard manures at a cost not exceeding £2 10s. per acre, or 16s. per qr., making £2 5s. 9d. per qr. delivered sold in England.

It would thus appear in roughly estimating the ability of those countries to produce Wheat, that the cost thereof may lay somewhere between 40s. and 45s. per qr. at a period subsequent to the time when the Western lands shall require to be cultivated upon the approved models of older countries; but that for the present and during the next 20 years, with seasonable growing and harvest weather, cost may be kept within 30s. to 35s. per qr. for Spring and Winter Wheats delivered sold in England.

With such figures in view it would seem a subject for immediate and grave contemplation by the English landowner whether he do not early decide to accept a rental upon his wheat lands of 3 to 4 per cent. upon a newly assessed value of per acre, nearly 40 to 50 per cent. reduction; already some landlords have reduced their rents very materially.

It may not be unfitting to observe, that it has been the unbounded liberality of the British capitalist, and the consequent regrettable returns, unbounded loss, dividends nil, and original stock almost so, which has largely contributed to placing the American farmer in the masterful position of underselling the rest of the world. Take 3 to 15 or more years ago spring wheats were supposed to pay the farmer well

at 24s. per qr., at least he was satisfied (a singular phenomenon it must be admitted, proverbially speaking); the freight and charges through to this side then usually ruled at from 17s. to 30s., say 18s. 6d. per qr., or the full price delivered sold, 43s. 6d. per qr. In comparison with this price take present average current value here at 40s., the same will still leave to said farmer 25s. per qr., after deducting before stated freight and charges of 18s. per qr., thus paying him a handsome profit over cost of production in such favourable seasons as that of the past year.

**DOES RUNNING WATER PURIFY ITSELF?**—This subject was discussed in the November *Popular Science Monthly*, by J. A. Judson. He takes a decided negative, as will be seen by the following paragraph:—"It is not impossible to point out authorities or sanitary matters so wedded to pet theories that they unhesitatingly deny that the conversion of a pure running stream, or even a large river, into a conduit for sewage-filth of a large city will have any deleterious effect on the potable quality of the water taken a few miles below the filth-entering point. It has been demonstrated that this is not only false in theory but also in fact. It was Dr. Letheby, of the English "Royal Commission on the Water Supply of London," it is believed, who was the first to announce what has since been proved a fallacy, viz., that if sewage be mixed with twenty times its volume of river water, the organic matter which it contains will be oxidized and completely disappear while the river is flowing a dozen miles or so;" and further, that "it is safe to drink sewage-contaminated water after filtration." The "Royal Rivers Pollution Commission," 1886, unwilling that this expression of opinion should remain untested, submitted it to careful and ingenious experimental investigation. The result is thus announced:—"It is thus evident that so far from sewage mixed with twenty times its volume of water being oxidized during a flow of ten or twelve miles, scarcely two-thirds of it would be so destroyed in a flow of one hundred and sixty-eight, at the rate of one mile per hour, or after the lapse of a week." And, after mentioning certain details in support of this, the commissioners conclude with the remark that "it will be safe to infer, however, from the above results, that there is no river in the United Kingdom long enough to effect the destruction of sewage by oxidation." Dr. Frankland, an eminent English authority, before the Royal Commission on Water Supply, gives some strong testimony in support of the statement that it is impossible to remove the sewage contamination from water by any known process, natural or artificial, so as to render it harmless, except by boiling for a long time, or by distillation; and as these two processes are impracticable on a large scale, then, he says, in his opinion, "Water that has once been contaminated by sewage ought not afterward to be used for domestic purposes; and, inasmuch as it is generally believed that the noxious matter of sewage exists there in the form of minute germs, which are probably smaller than blood globules, I do not believe that even filtration through a stratum of chalk could be relied upon to free the water perfectly from such germs."

**THE PRICE OF MEAT.**—A "Family Man" writes to the *Daily Telegraph*:—"One of the large wholesale firms in the City had their attention called some few weeks ago by their cashier to the high price they were paying to the butcher who supplied them, for meat—1½d. per lb. all joints. The butcher was sent for, and he told them it was impossible for him to do them justice at a lower price. Some short time afterwards the firm received a letter from one of the large butchers in London, making them an offer to supply all joints at 8½d. per pound round. On the following settling day (weekly) their butcher came to receive his account. The cashier then told him of the offer they had from another firm to supply them at 8½d. 'If,' said he, 'you like to take that price we will continue our account; otherwise we shall not give you further orders; at the same time we give you the option of retaining our trade (which will amount to £1,000 or more in the year).' The butcher at once said he would supply them at that price, and still continues to do so, notwithstanding his previous statement that he could not afford to do it at less than 1½d."

## AGRICULTURAL MEETINGS IN 1879.

**MARCH 5 and 6.**—Birmingham Shorthorn Show and Sale—Meeting at Birmingham. Entries close February 11. Secretary, Mr. John B. Lythall, Bingley Hall, Birmingham.

**MARCH 8.**—Norfolk Agricultural Society's Spring Show—Meeting at Norwich. Entries close March 1. President, Robert T. Gurdon, Esq. Secretary, Mr. James Bacon, Attleborough.

**MARCH 22.**—Cambridge Spring Entire Horse Show—Meeting at Cambridge. Entries close March 15. Hon. Secretary, Mr. Smith H. Rowley, Histon, Cambs.

**APRIL 3.**—Royal Jersey Agricultural Society's Horse Show, &c.—Meeting at St. Helier's. Entries close March 29. President, Gervase Le Gros, Esq. Secretary, Mr. F. Labey, Le Patrimoine, Jersey.

**APRIL 15, 16, 17, and 18.**—Royal Dublin Agricultural Society's Spring Show—Meeting at Dublin. Entries close, single feet, March 13; double, 20. President, The Duke of Leinster, Secretary, Mr. David G. Rogers, Agricultural Office, Kildare Street, Dublin.

**APRIL 29 and 30.**—Ayrshire Agricultural Society—Meeting at Ayr. Entries close a fortnight previous. Secretary, Mr. J. McMurtrie, 70, Newmarket Street, Ayr.

**MAY 7 and 8.**—Glasgow Agricultural Society—Meeting at Glasgow. Entries close April 23. President, The Duke of Montrose. Secretary, Mr. Mark Marshall, 14t, St. Vincent Street, Glasgow.

**MAY 14 and 15.**—Newark Agricultural Society—Meeting at Newark. Entries close within one week. President, The Mayor of Newark. Secretary, Mr. Thomas Earp, The White House, Newark.

**MAY 20, 21, and 22.**—Devon County Agricultural Association—Meeting at Devonport. Entries close April 17. President, Sir John St. Aubyn, Bart., M.P. Secretary, Mr. John L. Winter, Bridgetown, Totnes.

**MAY 23.**—Royal Jersey Agricultural Society's Show of Cows, &c.—Meeting at St. Helier's. Entries close May 17. President, Gervaise Le Gros, Esq. Secretary, Mr. Fra. Labey, Le Patrimoine, Jersey.

**MAY 29.**—Stirlingshire (Eastern District) Agricultural Society—Meeting at Falkirk. Entries close May 24. President, John Russel, Esq. Secretary, Mr. Thomas Binnie, Falkirk.

**MAY 31, JUNE 2, 3, 4, 5, and 6.**—Agricultural Hall Co.'s Horse Show—Meeting at Agricultural Hall. Entries close May 19. President, Robert Leeds, Esq., the Chairman of the Co. Secretary, T. Sydney, Agricultural Hall, Lillington.

**JUNE 2, 3, 4, 5, and 6.**—Bath and West of England Agricultural Society—Meeting at Exeter. Entries close, for Stock and Implements, April 16; Poultry, May 1. President, The Earl of Morley. Secretary, Mr. J. Goodwin, 4, Terrace Walk, Bath.

**JUNE 11 and 12.**—Norfolk Agricultural Society's Summer Show—Meeting at East Dereham. Entries close May 3. President, Robert T. Gurdon, Esq. Secretary, Mr. James Bacon, Attleborough.

**JUNE 11 and 12.**—Royal Cornwall Agricultural Society—Meeting at Falmouth. Entries close May 3. President, The Hon. T. C. Agar Robartes. Secretary, Mr. Henry Treasna, Lawellyn, Frobis.

**JUNE 18 and 19.**—Peterborough Agricultural Society—Meeting at Peterborough. Entries close May 31. President, Marquis of Tavistock. Secretary, Mr. J. E. Little, Minister Gateway, Peterborough.

**JUNE 19 and 20.**—North East Agricultural Association of Ireland—Meeting at Belfast. Entries close May 12. President, General Viscount Templetown, K.C.B. Secretary, Mr. G. Gerald Bingham, Ulster Buildings, Belfast.

**JUNE 19 and 20.**—Suffolk Agricultural Society—Meeting at Lowestoft. Entries close May 27. President, Col. St. John Harne, M.P. Secretary, Mr. Robert Bond, Old Bank House, Ipswich.

**JUNE 24, 25, and 26.**—Doncaster Agricultural Society—Meeting at Donca. Entries close May 31. President, Lord Auckland (Edenthorne). Secretary, Mr. George Chafer, 9, Market Place, Doncaster.

**JUNE 25 and 26.**—Essex Agricultural Society—Meeting at Haverhill. Entries close May 21. President, Lieut.-Col. F. B. Bagelow-Bisco, M.P. Secretary, Mr. Frank Whitmore, 24, Duke Street, Chelmsford.

**JUNE 30, JULY 1, 2, 3, 4, 5, and 7.**—Royal Agricultural Society of England—Meeting at London (Kilburn). Entries close, Implement, April 1; Stock, May 1. President, H. R. H. The Prince of Wales, K.G. Secretary, Mr. H. M. Jenkins, 12, Hanover Square, W. [There will be no separate meeting of the Royal Counties (Hants and Berks) Society this year.]

**JUNE 20.**—Alexandra Palace Horse Show—Meeting at Alexandra Park. Manager, W. H. Innes, Alexandra Park.

**JULY 3.**—Banff Agricultural Society—Meeting at Banff. Entries close June 28. President, The Earl of Fife, K.T. Secretary, Mr. George Umming, Banff.

**JULY 16.**—Huntingdonshire Agricultural Society—Meeting at St. Ives, Hants. Entries close June 24 to July 1. President, B. Brown, Esq. Secretary, Mr. Arthur Geo. Dilley, Market Place, Huntingdon.

**JULY 16, 17, and 18.**—Lincolnshire Agricultural Society—Meeting at Stamford. Entries close June 9. President, The Marquis of Exeter. Secretary, Mr. S. Upton, St. Benedict's Square, Lincoln.

**JULY 17.**—Bedfordshire Agricultural Society—Meeting at Bedford. Entries close June 21. President, Lord St. John, Melchbourne Park, near Redford. Secretary, Mr. H. E. J. Swaffield, Ampthill.

**JULY 18.**—Driffield and East Riding Agricultural Society—Meeting at Great Driffield. Entries close July 4. President, Christopher Sykes, Esq., M.P. Secretary, Mr. W. Dunn, Market Place, Driffield.

**JULY 22.**—Malton Agricultural Society—Meeting at Malton. Entries close July 5. President, The Hon. Henry W. Fitzwilliam. Secretary, Mr. William Constable, Malton.

**JULY 22 and 23.**—Nottinghamshire Agricultural Society—Meeting at Redford. Secretary, Mr. J. Barron, 16, Market Street, Nottingham.

**JULY 23, 24, and 25.**—Shropshire and West Midland Agricultural Society—Meeting at Shrewsbury. Entries close June 20. President, C. C. Cotes, Esq., M.P. Secretary, Mr. W. L. Browne, Castle Mills, Shrewsbury.

**JULY 24.**—Cleveland Agricultural Society—Meeting at Middlesborough. Entries close July 9. Secretary, Mr. T. Gisborne Fawcett, Yarm, Yorkshire.

**JULY 24.**—Northumberland Agricultural Society—Meeting at Berwick-on-Tweed. Entries close July 1. President, Earl Grey. Secretary, Mr. Henry Wallace, Trench Hall, Gateshead.

**JULY 29, 30, and 31.**—Worcestershire Agricultural Society—Meeting at Malvern. Entries close June 28. President, Earl Beauchamp. Secretary, Edward T. Goldingham, 6, Foregate Street, Worcester.

**JULY 29, 30, 31, and AUGUST 1.**—Highland and Agricultural Society of Scotland—Meeting at Perth. Entries close June 13. President, The Marquis of Lothian. Secretary, Mr. F. N. Menzies, 3, George IV. Bridge, Edinburgh.

**JULY 30 and 31.**—Leicestershire Agricultural Society—Meeting at Ashby-de-la-Zouch. Entries close, Stock and Implements July 6; Poultry July 12. Presidents, The Duke of Rutland, K.G., and Earl Howe. Secretary, Mr. J. T. Maron, Syston, Leicester.

**AUGUST 5.**—Border Union Agricultural Society—Meeting at Kelso. Entries close July 11. President, Duke of Roxburgh. Secretary, Mr. John Usher, 25, Bridge Street, Kelso.

**AUGUST 5, 6, and 7.**—Yorkshire Agricultural Society—Meeting at Leeds. Entries close June 28. President, Colonel Gunter. Secretary, Mr. Marshall Hopkinson, York.

**AUGUST 7.**—Coquetdale Agricultural Society—Meeting at Warkworth. Entries close July 17. President, S. F. Widdington, Esq. Secretary, Mr. Robert Dinkur, Rothbury, Northumberland.

**AUGUST 12, 13, 14, and 15.**—The Birmingham and Midland Counties Horse and Hound Show—Meeting at Birmingham. Entries close July 24. Secretary, Mr. John B. Lythall, Bingley Hall, Birmingham.

**AUGUST 15.**—Fas. Cumberland Agricultural Society—Meeting at Carlisle. Entries close August 2. President, H. Howard, Esq. Secretary, Mr. George Wood, 33, English Street, Carlisle, and Wetheral.

**AUGUST 20.**—Beamish, Pontop, and Consett Agricultural Society—Meeting at Whickham, near Gateshead. Entries close August 6. President, Lieut.-Col. Joyce, Newton Hall, Northumberland. Secretaries, Messrs. John Richards, and George Ridley, Beamish, Chester-le-Street.

**AUGUST 20 and 21.**—Ormskirk and Southport Agricultural Society—Meeting at Bootle. Entries close August 2. President, The Earl of Derby. Secretary, —, Maghull, Liverpool.



AUGUST 27.—Airedale Agricultural Society—Meeting at Bingley. Entries close August 18. Secretary, Mr. Jesse Thompson, Main Street, Bingley.

AUGUST 27.—North East Somerset Farmers Club—Meeting at Newton Park, Newton-St. Loe, near Bristol. Entries close August 26. President, The Earl of Warwick. Secretary, Mr. John Tuddall, Chew Magna, near Bristol.

AUGUST 29 and 30.—Cheshire Agricultural Society—Meeting at Chester. Entries close August 1. President, the Duke of Westminster, K.G. Secretary, Mr. William Beckett, Orton Park Farm, Tarporley.

AUGUST 30.—Halifax and Calder Vale Agricultural Society—Meeting at Halifax. Entries close August 16. President, Sir Henry Edwards, Bart. Secretary, Mr. William Irvine, 18, Chesapeake, Halifax.

SEPTEMBER (First Week).—Royal Manchester, Liverpool and North Lancashire Agricultural Society—Meeting at Manchester. Entries close August 1. President, The Earl of Ellesmere. Secretary, Mr. Thomas Rigby, 24, Cross Street, Manchester.

SEPTEMBER 2 and 3.—Derbyshire Agricultural Society—Meeting at Derby. Entries close, for Roots, Growing Crops, Implements, &c., August 22, for Poultry, Pigeons, &c., August 19, for Stock, August 1. President, Lord Vernon. Secretary, Mr. George Corbett, Canal Office, Derby.

SEPTEMBER 4.—Leominster Agricultural Society—Meeting at Leominster. Entries close August 29. Secretary, pro tem., Mr. Edwin Grey, 9, Broad Street, Leominster.

SEPTEMBER 9.—Cartmel (Lancashire) Agricultural Society—Meeting at Cartmel. Entries close August 27. Patron, Lord Edward Cavendish. Secretary, Mr. William Cragg, Cartmel, via Carnfalk.

SEPTEMBER 9.—Wolsingham Agricultural Society—Meeting at Wolsingham. Entries close August 30. Secretary, Mr. Wm. Rutter, Wolsingham, via Darlington.

SEPTEMBER 10 and 11.—Wirral and Birkenhead Agricultural Society—Meeting at Birkenhead. Entries close August 27. President, Richard Barton, Esq. Secretary, Mr. A. F. Gardner, 23, Hamilton Street, Birkenhead.

SEPTEMBER 17 (P).—Royal and Central Bucks Agricultural Society—Meeting at Aylesbury. Entries close 21 days before. Secretary, Mr. George Fell, Aylesbury.

SEPTEMBER 18 and 19.—Staffordshire Agricultural Society—Meeting at Wolverhampton. Entries close, Stock and Implements August 16, and Poultry August 30. Secretary, Mr. W. Tomkinson, Newcastle, Staffordshire.

SEPTEMBER 23.—Alfreton Midland Agricultural Society—Meeting at Alfreton. Entries close August 23. President, C. R. F. Morewood, Esq., J.P. Secretary, Mr. Arthur Milner, Stretton, near Alfreton.

SEPTEMBER 23.—Chapel-en-le-Frith Agricultural Society—Meeting at Chapel-en-le-Frith. Entries close August 30. President, W. H. G. Bagshawe, Esq., J.P. Secretary, Mr. George H. Swift, Chapel-en-le-Frith.

SEPTEMBER 24.—Frome Dairy Show and Agricultural Society—Meeting at Frome. President, S. K. Harding Esq. Secretary, Mr. Walter Harrold, The Mart, Frome.

OCTOBER 1.—Royal South Bucks Agricultural Society—Meeting at —. Entries close July 1. Secretary, Mr. R. H. Barrett, Slough, Bucks.

OCTOBER 31.—Ayrshire Agricultural Society's Show of Dairy and Farm Produce—Meeting at Ayr. Entries close a fortnight previous. Secretary, Mr. J. McMurtre 70, Newmarket Street, Ayr.

NOVEMBER 6.—Royal Jersey Agricultural Society's Show for Agricultural Produce—Meeting at St. Helier's. Entries close November 1. President, Gervaise Le Gros, Esq. Secretary, Mr. Fra. Lebey, Le Fatrimoine, Jersey.

NOVEMBER 25 and 26.—Tredegar Agricultural Show—Meeting at Newport, Monmouthshire. Entries close October 29. President, Lord Tredegar. Secretary, Mr. J. G. Palling, Tredegar Estate Office, Newport, Monmouthshire.

NOVEMBER 27 and 28.—Chippenham Agricultural Society—Meeting at Chippenham. Entries close November 20. President, Algernon W. Neeld, Esq. Secretary, Mr. Edward Little, Lambill, Chippenham.

NOVEMBER 29, and DECEMBER 1, 2, 3, and 4.—Birmingham Agricultural Exhibition—Meeting at Bingley Hall, Birmingham. Entries close, Implements, October 18, Stock and Poultry, November 1. Secretary, Mr. J. B. Lythall, Bingley Hall, Birmingham.

DECEMBER, (1st week).—Edinburgh Fat Cattle Show—Meeting at Edinburgh. President, The Duke of Buccleuch. Secretary, Mr. Hugh Marten, 7, Hope Street, Edinburgh.

DECEMBER 8, 9, 10, 11, and 12.—Smithfield Club Fat Cattle Show—Meeting at the Agricultural Hall, Islington. Entries close, Implements, &c., October 1, Live Stock, November 1. President, Col. Kingscote, C.B., M.P. Hon. Secretary, Sir Braundeth Gibbs, Half-Moon Street, Piccadilly.

DECEMBER 9, 10, and 11.—Yorkshire Society—for the Christmas Exhibition of Stock, Poultry, and Roots—Meeting at York. Entries close November 20. President, the Earl of Harewood. Secretary, Mr. John Watson, Lendal Bridge, York.

DECEMBER 11, 12, and 13.—Canterbury Fat Cattle Show—Meeting at Canterbury. Entries close November 8. Secretary, Mr. George Slater, Canterbury.

A NEW MATERIAL FOR PAPER.—The consumption of esparto grass by paper-makers in France and England is now very large, and it is yearly increasing. Sir Joseph Hooker and Mr. Ball, in their recently published journal of a "Tour in Morocco," tell us they saw immense bales of this grass being shipped from the port of Mogador, and "that it is there said that the greater part of what reaches England from Morocco is used in the paper-mills that supply the *Times* newspaper." The great value of this grass as a paper-making material lies in the tenacity of its fibre and the comparatively minute quantity of silica in its composition. In these respects it would appear that we have in all wet, healthy places, moors, and damp woods throughout Great Britain and Ireland, and extending over all Europe and into Russian Asia, wherever suitable places for its growth are to be found, a similar material in the grass long known as the purple molinia (*Molinia caerulea*). It is a rather coarse, stiff, perennial grass, often growing to a height of 3 ft.; the leaves chiefly form tufts and start from the base of the plant; the flowering stalk is of a greenish or purple hue. It is found over all the moorlands of Scotland and in all the boggy pastures of Ireland and has been considered of little, if any, agricultural value; it is gradually by cultivation being destroyed. From an analysis of hay made from this grass by Dr. Cameron, it would appear to contain an unprecedentedly small amount of ash—only 0.85 parts out of 100 parts of hay (dry weight)—and a scarcely appreciable amount of silica. In 100 parts of the ash only 0.55 of silica was found. Dr. Cameron does not suggest this grass as being of value as a paper-making material, but he calls the attention of farmers to the fact that it is well worth saving as a food product, as its composition indicates a high degree of nutritive value; indeed, it appears to be quite as rich as meadow hay in all its common ingredients except digestible non-nitrogenous matters. Its analysis, however, indicates its qualities as a paper-making material, as which it would have a higher commercial value than as an article of food, and in a communication to *Nature*, Mr. Christie, of Edinburgh, states that he sent a small quantity of the grass to be operated on by Mr. T. R. Kedge, of Sunderland, who, after experiment, came to the conclusion that if dried properly and put up carefully in bundles, free from weeds and dirt, its value would be probably equal to esparto grass—£5 per ton dry. It is to be hoped that some effort may be used to have an extended trial for paper-making of this plant. It flowers in the late summer or early autumn, when in this country some hands could be readily spared from other work to collect it. It should cost little over the mere expense of gathering, as the ground in which it flourishes, as a rule, will pay but a minimum of rent.—*Times*.

FISH AND FOWL.—"How sharper than a serpent's thanks it is to see a toothless child." Here, for instance, is the —, a London five-year-old, copying in a single issue seventeen columns of the *New York Tribune*, and crediting one of them. And it wasn't an unusually good week for international angling either.—Those journals that live "by hook and by crook"—mostly by hook—labour under the disadvantage of having suspicion attach even to that by which they come honestly. "This is a moral that runs at large."—"Am these our chickens?" asked a coloured contemporary, with suddenly quickened conscience, as he suspended hostilities in a neighbour's hen-roost between two days. And his copartner, who is understood to have aspirations for an agricultural editorship, made quick reply: "Dat am a great moral question—pass down another pullet."—*New York Tribune*



## FOREIGN AND COLONIAL AGRICULTURE.

The departmental meeting held at Nevers (Nièvre) on the 7th, 8th, and 9th ult., was unprecedentedly successful, says the *Journal d'Agriculture Pratique*. The large attendance was the more remarkable since few promenaders pure and simple were present; thus the show partook more of the character of a training school than a mere exhibition. In the Halle, devoted to fat stock, were 120 beasts, 125 sheep, and 65 pigs. Shedding accommodated over 400 specimens of breeding stock, three-fourths of which were cattle of the local breed, the Neversais-Charolais. In the park, tastefully decorated for the occasion, were lodged 80 fine stallions; here also the machinery was displayed. There were exhibits also of poultry, cheese, butter, and wines. Among the fat cattle were many handsome specimens of the cross between the Shorthorn and Charolais herds, their colour being a shade between the two, namely a dun or coffee tint, with spots approaching whiteness. These animals fatten rapidly; one of those in the show, which took a first prize, weighed over 24 cwt., while another actually reached the weight of 25 cwt. The sheep were mainly of the Berrichonne, Southdown, Dishley, Southdown-Berrichonne, and Dishley-Berrichonne varieties. The stallions excited great interest, their presence being due to the enterprise of the Agricultural Society of the Nièvre. Up to 1874 the local breed of horses was very poor. Since then, however, 27 stallions have been imported into the department, while three have been reared therein. The purchaser is charged by the society with cost price only, but he must engage to keep the animal in the department for a term of six years, at the same time seeing that he is employed each year for breeding purposes. He may dispose of his stallion provided the new owner submit to the Society's conditions. Infringement of the rules implies the forfeit of the purchase money to the Society, and, further, exclusion from future advantages.

M. Th. Piltet, the well-known agent for the leading English and American implement manufacturers, has been nominated to the grade of Chevalier of the Legion of Honour.

Our Canadian correspondent writes:—The Canadian emigration office at Liverpool is issuing absurdly exaggerated and misleading statistics anent the pretended cattle exports from this colony to Britain. In the *Mark Lane Express* of February last, under the signature of "Hampshire," a correspondent gave a very full account of the then newly-developed live-stock export business, and as I have a good knowledge of the subject—know as much about it, indeed, as most people in Canada—you may accept my statement that "Hampshire's" figures were correct, save perhaps on two points. I think he, in common with the *Scotsman's* able commissioner and some others, somewhat under-estimated the probable supply of graded animals from the United States, suitable for the English market, and a little over-estimated the Canadian capabilities, which he put down at about 7,000 beasts annually, but which I would set down at 5,000. His statements about the dodges practised to make the Colonial exhibit larger than it is, or ever can be, about the little interest taken in the export business by anybody here save the emigration agents and a few domiciled American speculative cattle buyers, for the simple reason that few farmers have any beasts to send, and the diligence with which the mythical Canadian exports are paraded in set paragraphs, supplied to the English press in order to induce English agriculturists to emigrate hither—all these I know to be true, as well as the fact mentioned by

"Hampshire," that the few thousand of really native produce we do send to Britain are driven up to Toronto and some other towns, in the fall, in a more or less lean condition, and confined in sheds, where they are gorged with distillery swill, till the opening of navigation in the spring permits their shipment.

Coming now to the fanciful figures of the Liverpool emigration office for 1868, figures which are put forth for a purpose, and which even so able and well-informed a paper as the *Manchester Guardian* has hastily taken for gospel, I find the following absurd exhibit: "Exported from Canada to Great Britain, *via* Canada and the United States, 82,115 head of fat cattle, 62,461 sheep, and 1,798 pigs." These pretended Canadian exportations are not worth serious consideration. They may serve their object as an emigration bait to dangle before unknowing English farmers, but any facts deduced from them are quite misleading and worthless. It is impossible for Canada to send 82,000 head of cattle to Britain in a year. That amount of superfluous stock of a quality suitable for the English market is not in the country-graded animals which alone are of suitable quality, and command remunerative prices. The meat of the native beast is tough and tasteless, and is severely let alone by practised exporters. In fact, the ordinary stock of this country is useless for shipment.

If there be anybody so gullible as to believe the figures given above, let him read the following from the *Toronto Globe*, which, alarmed at the demand of the Welland farmers for protective duties against American produce—particulars of which I have recently sent you—and momentarily oblivious in its panic of the pyramid of fiction it has been itself laboriously building up, re the mythical "Canadian" cattle exports to England, lets itself for once be surprised into the truth, as follows:—

"The imposition of a twenty per cent. duty on live animals would be a most disastrous piece of folly. Until the live stock trade with England sprang up, Ontario imported no animals from the United States except a few which were bought by the farmers themselves. . . . If a duty of a hundred per cent. were put upon American cattle coming into Ontario, our farmers would not be advantaged. On the contrary, as they themselves occasionally import they would have to pay the duty. But the certain result of the proposed increase of our present ten per cent. duty to twenty per cent. will be to kill off the cattle trade with Britain. . . . At present the shippers of live stock cannot find half enough good cattle with which to fill the ship-space contracted for. It is only by boldly entering into large contracts a long time ahead that ship-space can be procured on advantageous terms. If these contracts were not entered into pluckily, as they are, the transportation rates would be well-nigh double their present figures. Without liberty to draw on the exhaustless herds of the Western plains in order to fill out their ship-space, the exporters of live stock cannot carry on their present trade. More than one-half of the cattle now being sent to England by Canadians are American cattle, and unless these cattle can be brought in freely our farmers must be content to lose from 10 dols. to 15 dols. per head of the price which they now get for exported cattle. It is not as though the American cattle could not get to market unless we took them. The contrary is the case. Unless we take them they will go by American ports, and thus help to build up a large trade, which cannot but eventually swamp our smaller business. The increase of the duty on live stock is therefore a suicidal policy for our farmers to support. What applies to cattle applies in a less degree to sheep and to horses.

—*Toronto Globe*, Jan. 25, 1879.

This is the style in which the *Globe* backs its friends

of the Liverpool Romance office, and gives itself and them away in its apprehension of a 26 per cent. duty on American cattle, which it knows, as well as anybody would summarily burst the bubble of "Canadian" live stock exportation. I add a few other testimonies on the subject.

"A Toronto company shipped during the week 280 head of cattle, of which 240 were bought in Buffalo."—*Montreal Times*, Jan. 17. 1879.

"Toronto cattle exporters have agents at Buffalo, Chicago, etc., to purchase stock for exportation to the English markets. The shipments from Buffalo eastward were, during last year, 601,231 cattle; 1,587,890 hogs, and 856,500 sheep."—*Mail*, Jan. 7th.

"At the present time three-fourths of the cattle shipped by 'Canadian' firms have been purchased at Chicago or Buffalo. This course is forced upon the exporters because the necessary number of bees cannot be obtained here."—*Ibid*.

Again in the weekly review of the Toronto wholesale markets, in the same paper we read (Jan. 23rd), under the head of Bees:—"Receipts have remained much the same as last week, the total being large, but consisting almost entirely of inferior grades. An active inquiry has been manifested for shipping lots, and within the next week one firm will ship 220 head from Boston, and another 140 head from Portland, but of these lots only one-third has been bought in this market, the rest coming from the States."

It is these animals *bought in the States*, and shipped by *American buyers*, for in fact, the chief of the dealers who hold this trade in their hands in Canada are Americans by birth domiciled at Toronto, that Mr. Dyke has the exceeding coolness to call "Canadian" produce exported "from Canada" to Great Britain "via the United States." They are no more Canadian produce than I am a Dutchman. In fact, their only connection with Canada is that the firm which buys and exports them, has its head quarters in a Canadian town. In one week recently this Toronto firm shipped to England 1,500 cattle by way of Montreal. Most of these were purchased in the States, but they were chronicled in the paragraphs supplied to the English press by the wire-pullers as "another extensive arrival of 'Canadian' live stock." The simple reason why this export company carries on its American business at Toronto is that it is an acknowledged trade centre with good facilities for the handling, care, and shipment of stock, and with excellent railway arrangements for loading and unloading the bees.

[Our correspondent adds more evidence, for which we have no space. The above will suffice.]

**A LESSON IN POTATO CULTURE FROM THE PARIS EXHIBITION.**—Very few among the myriads who explored the Paris Exhibition, gave attention to the garden and museum of the Agricultural School of Vincennes. It may almost be said that nobody knew of the existence of the combined demonstration of the uses of applied chemistry in agriculture, intended by this particular feature of the exhibition. On an out-of-the-way slip of land adjoining the river and lying below the level of the more frequented roads at the junction of the Trocadéro grounds with the bridge—that is to say, immediately on the right hand in entering upon the bridge on the way towards the Camp de Mars—this demonstration was planned for the service of all mankind. Descending a flight of steps, there opened on the view a little garden hemmed in by steep earthenworks, and terminating in a museum. The garden was planted with potatoes, tobacco, hemp, and chow de Milan. These were conspicuously labelled, to explain the kind of treatment in respect of mineral fertilizers, to which they were subjected. It struck me that the garden was too small and the crops too few, and the chemical scheme too contracted to serve any very useful purpose; but there appeared to be in the relative growth of the crops a distinct

lesson of the value of nitrogen—at all events, the plot of potatoes that had been aided by nitrogenous manures, presented a bolder frost in respect of shaws than the plot that had not been aided; but we do not judge potatoes by the shaw solely. We like to see, and even taste the roots, before passing a final judgment on any particular system of cultivation. The museum was full of attractions of a serious nature, all admirably prepared. Amongst a hundred things that might engage our attention advantageously, special mention must here be made of the results of a trial culture of potatoes with a set of specially prepared chemical manures. Six plots had been grown—each, of course, of the same size, and the same sort, the circumstances differing only in one respect, of the fertilization of the soil for them. The several crops had been fairly for this purpose heaped up and photographed, and the diagram accompanying this note faithfully represents the series. It will be understood, of course, and yet may be worth mentioning, that in every case, save the last (No. 6), there was something added to the soil, to assist the growth of the potatoes. This last lot tells us plainly that the trial was made on poor ground, for the experiments of Mr. Lawes have shown conclusively that superfluous manuring is sheer waste, so if we add—say potash—to a soil that contains enough potash already, the crop is in no way increased, and we have wasted our time, and thought, and money. Now, at this point a nice consideration comes in. If we supply (say) potash only, the plant is compelled to seek for lime, soda, phosphate, nitrogen, &c.,—whatever, in fact, it may need to enable it to turn to account in a proper proportionate manner, the other minerals needful to its growth—in the natural soil, which is never utterly deficient, for we have not seen the soil yet that will not produce a blade of grass. Now, for the consideration of this particular case, it is not needful to state what is the precise composition of the "complete manure." The photographs illustrated the unknown almost more graphically—at it seems—than the known. Let it suffice then that No. 1 is the crop from the plot that was aided by the *complete manure*. No. 2 shows the crop grown by the complete manure, *minus nitrogen*. No. 3 is the crop from the complete manures, *minus phosphates*. This is a fine lot, only a shade inferior of No. 1, and it suggests that the natural soil contained a fair proportion of phosphates, which were inert unless aided with other agencies. No. 4 is the crop from a plot from which potash was omitted, and it forcibly illustrated the importance of this alkali in the growth of the potato. No. 5 is not less instructive. It is from the plot aided by the complete manure, *minus lime*. The proportion of calcareous salts in the potato is exceedingly small, and on most soils the plant can pick up as much lime as it wants. This No. 5 illustrates indirectly the origin of scab. As it occurs chiefly in connection with lime, and potatoes need but little lime, scab may be the result of a plethora of the superfluous mineral. No. 6 as remarked above, is the produce of the natural soil, without any aid whatever. It is very telling in favour of scientific manuring, but it must always be remembered that the cost of the manure must be considered in connection with the value of the crop, for it is impossible to pay too much even for a good thing. Some account of a series of experiments conducted at Vincennes, resembling, in many respect, the present trial of special manures with potatoes, was published in the *Garden Oracle* for 1872. Reference to the record will show that the results were equally definite with those now reported on.—S. H., in *Gardener's Magazine*.

**FASHION AND MORALITY.**—"Show me the fashion plates of any age," said Talmage, "and I will tell you the type of morals or immorals of that age or that year." All right, brother Talmage (says the *Boston Post*); we suggest the age of Adam and Eve. We haven't the plates handy, but doubtless you recollect them.

**PERSEVERANCE.**—The Michigan papers tell a story of a man who, having separated from his wife after several years of married life, advertised for another helpmate under an assumed name. His divorced wife replied to him, also under an assumed name. They met by appointment, and one can conceive their surprise on recognising each other. The matter, however, ended happily, and after exchanging explanations they resolved to forget the past and to marry again.

## THE AGRICULTURAL DEPRESSION.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—There is no doubt that by this time it is pretty well known, even to outsiders, that farming is far from a paying game, and that it stands side by side with the great general depression of trade. But one thing is not so well known or noticed, namely, that this is the fourth consecutive bad year for the farmers, or at least for the great majority of them. Some have, of course, felt it more severely than others, and it is my humble opinion it is the "pound an acre men," farming cold clays, which cannot carry a breeding flock, who are the worst off—men who have to fatten beasts in the yards, which is directly an unpaying operation, though necessary for treading down straw which the farmer is forbidden to sell, and for fudging dung for the wheat crop. Just fancy a shop-keeper selling or being forced to sell an article that did not pay him, that he may have the privilege of selling another article which, if he does not lose by, barely clears his expenses. Another thing is, that this class of land requires more labour than any other, and nothing is grown in the furrows of the five-turn land, or in the water furrows, which must be drawn or the wheat will rot. I speak from experience. In fact, I used to serve clover, roots, and ploughed furrows all alike. It pays to do it, but the having to do it is a disadvantage. Have such farms averaged more than threequarters per acre since 1874?

The men who have managed to hold their own are those who have large stock (sheep) farms with plenty of good down land. Just look at their big four-cast lands, about eight times the width of Mr. Heavyclay's, and see how a pair of good stepping horses will walk away with a light plough, very differently from the mighty three or four horse teams, with man and boy, which crawl along to turn the above-named gentleman's furrows. But as a rule farmers of this class suffer from game, and especially from the ravages of rabbits. Where they are unmolested they are fairly comfortable. Yes, you may depend upon it, hedging, ditching, and water furrowing are quite a little rent. We will now turn to a class of men who, compared with the above-mentioned, know but few real sorrows. They are those who can breed their sheep and then fatten them, turning out 50s. lambs for the London markets by Easter; who have pair-horse land, are unmolested by game, and can sell their straw. They can feed plenty of cake on the land, instead of in yards, where it is nearly all washed away. They can grow a crop that pays better than wheat into the bargain, namely, barley, at 45s. and 46s. per quarter. And what do these men do in return for all these good things? Why, their land costs them 20s. or 25s. an acre more, which is soon made up by an extra stack of wheat, let alone the labour. There is another thing that must not be forgotten—that is, that farmers of 400 or 500 acres rarely have enough capital in the land, and we can't do with less than £10 an acre. If a man with a couple of thousand pounds would put it in a farm of 180 to 200 acres, his chances would be far better than with an unwieldy place of over 300, which nine times out of ten he takes because the rent is low, and it is such an easy entry, "nothing to take to." How about the ghost of the man who has gone before, and the legacy of couch grass duty free? No, depend upon it, our farms must be as clean as gardens, our cropping untrammelled, and we in return must not forget to ram in the cake. Let Parliament give us protection, not for our wheat, but for our capital that sleeps in the land.

I am, Sir, &amp;c.,

February 10.

A. E. W.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I have read a very able article in the *Fortnightly Review* for this month, on "Agricultural Depression." Although I am not a farmer, I feel an interest in the subject through living in an agricultural district and having many friends in that line of business. I notice that the writer states the cost of transport of wheat from New York to be from 4s. 6d. to 6s. 6d. per quarter. His information probably is more authentic than mine, but, I have lately been in the company of an American farmer who is on a visit to this country, and whom I have questioned upon the subject of wheat-growing and exporting, with the following result:—He arrived in this country in October last. I asked him what price he obtained for wheat in America; he said £7 per load, and he sold it to the lighter men, but there is scarcely any sale at present, as all their stores are quite full. I asked him what it cost to convey it to this country, he said 9d. per qr. He saw a vessel loading just as he left, with 70,000 qrs. I asked if it paid him to grow wheat at that price, and if the Americans would continue to send us wheat if that price continued? He said, "We never had worse prices, but having such an excellent harvest, it was a very good year for us." As to continuing to send wheat to England, he said, "We must do so at whatever price we can get, as we have most of us got our own farms and can grow nothing that pays better; we do the best we can under the circumstances, and live accordingly. England is our only market for our produce." This man lives in Illinois, where he has been for 35 years. He owns his farm, and paid for it by selling the wood when he cleared it. He says the wheat yields best when grown under apple trees. He pays 12s. per day for labour in harvest time; and he and his sons do most of the work. Living is very cheap, and taxes are very light.

When the shipping trade is as bad as at the present time, and when, according to the editor of the *Fortnightly Review*, there are two million pounds worth of shipping lying idle in the harbour of Bombay, and every other port so full of ships that scarcely any can get a job which pays their expenses, and when copper is brought from South America as ballast, I should have thought the cost would be less than the *Fortnightly Review* stated. I think our farmers require to be free from a large amount of taxation, which at present the tenant pays. They have lately had an additional education tax, towards which they pay more than any other class. The highways have been thrown upon them through the abolition of turn-pike gates. But the great grievance appears to me to be the tithe. Ought not the landlords to pay that tax and then let the farms for what they will fetch?

I am, Sir,

A MAN OF BUSINESS.

P.S.—A small farmer in this neighbourhood told me last Saturday that he paid £1 per week for going to church, and he dislikes his clergyman so much that he will never go and hear him preach any more.

[There must be some mistake about the 9d. per qr. as the freight for wheat from New York to London. Ordinary charges are from 4s. 6d. to 6s. 6d.—ED.]

DEFINITIONS.—The School Board is responsible for the diffusion of much useless knowledge. A board examiner performing his functions in a purely agricultural parish recently asked a mixed class, "What is a husbandman?" No answer was given for some time, till at last a little girl ventured, "Please, sir, a man as has got a wife." The examiner became thoughtful, and sorrowfully took his way to a parish owned by a duke, and overawed by dual establishments. Here he said, "Tell me what is meant by a nobleman?" There was silence for a time; at last one smart little boy replied, "Please, sir, it's a gentleman as gains his livelihood by riotous living!"

## TITHE RENT CHARGE AVERAGES.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—It is to be regretted that at the present time when admitted distress exists amongst agriculturists, when landlords are endeavouring to meet it by percentages of reduction of rent, or alleviating it by some other praiseworthy act, farmers should be compelled to pay a tithe rent charge of £11 15s. 2½d. over the £100.

I know of but one case where an attempt has been made by a tithe owner to meet it, and that was by returning 5 per cent. on the last half-year.

Since the passing of the Tithe Commutation Act, 43 years ago, we find the average to be £2 18s. 11½d. per cent. over what it was then assessed at, thus showing that the tithe receivers were wiser in that generation than the sons of the soil. The result of the 43 years average also convincingly shows that the assessment was based at too high a value, since aggravated by the unfair way in which the averages are taken. At the time when this Act was passed farmers, as a rule, did not graze so much as now, consequently nearly all the inferior and tail corn was sold on the market reducing the averages. Now and for some time past great practical improvements have been made in farming, and they have been induced to consume all such corn on the farm, which, not being sold on the market, has consequently raised the averages. Moreover, samples of corn are sold over and over again on the same market or some other market at higher prices; these being returned, force up the average worked into Willich's Tithe Commutation Tables.

The overplus paid to the tithe owners in 38 years amounts to, in hard cash, £131 6s. 4½d. If we take the overplus paid year by year during that time and calculate simple interest and compound interest thereon at the rate of 5 per cent., the usual interest for capital employed in agriculture, we shall find that for every £100 tithe rent charge we have lost £226, or, in other words, if we had paid no more each year than the £100 we should be in possession of £226 more capital than we have now—the true measure of the injustice.

It is hard that the present distress should be intensified by exacting nearly 12 per cent. more than the framers of the Act contemplated, which, coupled with the unfair mode of taking the averages, induces me to express a hope that this question may be taken up by the Chambers of Agriculture throughout the country, and something of a more equitable character enforced upon the Legislature.

I am, Sir, &c.,  
JAMES S. GARDINER.

*Burley Lodge, Essex.*

## THE COST OF WHEAT-GROWING IN AMERICA.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—To you as the chief British authority in agriculture owners and occupiers both at home and abroad look thankfully for the information with which your columns abound. I would respectfully suggest the unspeakable service you would do us all by collecting the statistics of the cost of the production of cereals in this and other countries, so that by comparing notes we may really discover wherein our own deficiency lies.

Your journal has told us, on the avouchment apparently of those on whom it is safest to rely, that the average production of wheat in Illinois, Ohio, and generally in the Western States of America, scarcely exceeds eight to twelve bushels, and in the most fertile of all not more than sixteen bushels per acre. My friend, the Hon. A. Mackellar, late Minister for Agriculture in Upper Canada, sent me his reports, from which is to be

gathered the fact that twelve to twenty bushels is the average for that province. From these data I have inferred either that the competition of America at our present low prices is accidental and cannot pay, or else that with an average British production of 30 bushels per acre, and with customers at the farmer's very door, there must be somewhere a screw loose in his management if he cannot sustain such a contest. Labour is dearer in America than it is here; implements are dearer. The Americans must plough, and harrow, and sow, and reap, and stack, and thrash, just as we do. He must convey his grain over corduroy roads, or no roads at all, to rail or river, and from thence (in sacks that never come back) three thousand miles to an English seaport to be warehoused, waiting for a customer, and subject to rent, freight, and commission. If the American paid no rent or taxes at all, but only the cost of reclaiming his land from wood, wilds, or prairie, how can he hold on with such drawbacks, unless there be something materially wrong in our system?

It is "Far West", in Beerbohm's *Evening Corn List*, extracted in your last, that suggests to me these observations. Instead of from 8 to 12, or at most 17 bushels, as the American average produce, he assumes the yield to be 24. Either this quotation is absurd, or the reliable authorities quoted in the *Mark Lane Express* must be wholly mistaken. "Far West" gives the cost of "preparing the land, seeding, cutting, thrashing, marketing, and placing on the railway cars at interior," 14s. 9d. per qr. Why the sacks alone would cost 4s. of the money. Cartage, say 2s. more—(it must on an average come to more than that)—and there remains a balance of 8s. 9d. per qr., or 26s. 3d. for the whole charges of cultivating, reaping, thrashing, and stacking the quoted produce per acre. How is it that, if these data be reliable, our farmers cannot do for less than from £8 to £10 what Illinois, Wisconsin, and Toronto can do for £1 6s. 3d.? If the yield given by "Far West" be apocryphal, Cocker becomes still farther mystified.

Many would be thankful for a solution of these enigmas.

I am, Sir, &c.,  
SIDNEY SMITH.  
*The Manor, Feltham, Feb. 8th, 1879.*

[We shall be very glad to hear from American readers in reply to this letter. We fear, however, that it would be impossible to get at the average cost of producing wheat in any country. It would be very difficult to get at it in a single parish.—En.]

FAILURES OF FARMERS.—If figures were wanting to prove the evil times which encountered the British farmer in 1878, or rather the trying epoch of bad seasons and low prices which culminated in the bygone year in farspread agricultural ruin, the data lie to hand in the number of failures officially announced. It appears that 815 farmers failed in 1878 as against 477 in 1877. Nor do the evidences of depression stop here, for the auxiliary classes which form the fringe of the agricultural body, and link food producers and consumers together, have been reached by the same wave of misfortune. For 127 corn merchants, corn chandlers, hay and straw dealers who threw up the sponge in 1877 there were 184 last year; while 87 millers and corn dealers failed as against 36. Of bakers there failed 307 as against 183. Even the proverbially prosperous butcher, whose profitable margins between meat purchased and meat retailed have been a recent matter of criticism, show 399 *hors de combat*, in contrast with 326 in the preceding 12 months. Brewers alone of the trades connected with our food, tried by this test, come out unscathed by the troubles of the time, accounting only for 23 failures as against 31 within the preceding year.—*Chamber of Agriculture Journal*.

TO HIS ADVANTAGE.—The following announcement lately appeared in a newspaper:—"Edward Eden, painter, is requested to communicate with his brother, when he will hear of something to his advantage—his creditors are dead."

## TIP TREE FARM ACCOUNT.

## BALANCE SHEET, 1878.

PAID.

January 1.—Valuation:—	£	s.	d.
Live Stock ... ..	485	4	0
Poultry... ..	25	0	0
Horses and donkey ... ..	175	0	0
Tillage, manure, &c. ... ..	481	18	1
Hay, corn, &c. (unsold) ... ..	615	12	0
Implements ... ..	465	11	1
	2,349	5	2

(Fixed steam-engine, irrigation pumps, mill-stones, and thrashing machines, valued in estate.)			
Corn and hay for live stock, produce of farm, charged at market prices ... ..	75	10	0
Corn, cake, malt-combs, bran, &c., purchased for live stock ... ..	395	0	8
Grinding corn for live stock by our own engine, at the usual prices charged to others... ..	17	10	0
Veterinary ... ..	7	0	0
Medicals ... ..	431	5	0
Live stock purchased ... ..	88	4	0
Horse food purchased from farm... ..	65	13	0
Ditto purchased elsewhere ... ..	415	14	6
Farm-labour, including engine-driver, and working bailiff ... ..	56	0	0
Rent of chapel land, 45 acres ... ..	75	17	6
Tithes, taxes, poor, highway, church and county rates ... ..	25	0	0
Reserve for wear and tear and depreciation of machinery and implements ... ..	25	12	0
Coals for steam engine ... ..	78	11	9
Tradesmen's bills:—Wheelwright, blacksmith, founder, harness maker, bricklayer, carpenter, painter, basket maker, cooper ... ..	16	5	0
Malt and hops for beer for labourers ... ..	27	2	0
Seeds and plants purchased ... ..	68	15	0
Ditto of our own growth... ..	124	0	0
Purchased manures ... ..	45	0	0
Horses purchased... ..			
Miscellaneous petty expenses:—Mole and rat-catching, mending sacks, postage stamps, stationery and farm account books, oil, candles, cart grease, tallow, packing for engine, &c. ... ..	11	8	11
Thatching ... ..	8	0	0
Thatching staff ... ..	1	1	3
Hired steam ploughing ... ..	0	0	0
Ditto thrashing work ... ..	10	5	0
Grinding corn at our own mill for our farm horses ... ..	10	1	0
Fire insurance ... ..	3	15	0
Hail-storm insurance ... ..	3	7	0
	2,334	3	9

## RECEIVED.

December 31.—Valuation:—	£	s.	d.
Live stock ... ..	858	3	0
Poultry... ..	24	0	0
Horses and donkey ... ..	177	0	0
Tillages, manure, &c. ... ..	487	5	0
Corn and hay, &c. (unsold) ... ..	413	6	0
Implements ... ..	465	11	1
	2,342	2	6
Corn sold for money ... ..	834	16	9
Corn and hay sold to live stock, as per contra	75	10	0
Peas (picked for market) sold, after deducting all expenses ... ..	295	9	1
Home-grown corn used as seed, and charged per contra ... ..	68	15	0
Oats, beans, and hay, home grown, sold to our horses ... ..	88	4	0
Hay and straw sold ... ..	340	6	5
Bandries ... ..	11	2	6
Fat meat sold ... ..	638	4	0
Wool sold ... ..	0	0	0
Poultry and eggs sold ... ..	46	10	5

Grinding for hire ... ..	32	4	8
Grinding for own stock ... ..	17	10	0
Grinding for horses ... ..	10	1	0
Rent of cottages ... ..	16	4	0
Received for milk ... ..	15	0	0
	4,914	19	10

Paid ...

Balance for rent of 128 acres and profit and interest on 173 acres ... ..	4,343	3	9
	2,580	16	1

## DETAILS OF LIVE STOCK ACCOUNT.

## Valuation paid:—

Live stock ... ..	2,485	4	0
Poultry... ..	25	0	0
Corn and hay purchased off farm ... ..	75	10	0
Ditto elsewhere ... ..	395	0	8
Grinding corn ... ..	17	10	0
Veterinary, &c. ... ..	7	0	0
Live stock purchased ... ..	431	5	0
	2,143	9	8

## RECEIVED.

## Valuation:—

Live stock ... ..	2,858	3	0
Poultry... ..	24	0	3
Fat meat sold ... ..	638	4	0
Poultry ... ..	46	10	5
Milk ... ..	15	0	0
	2,158	17	5

Paid ...

Balance ... ..	1,436	9	8
	2,145	7	9

To pay for attendance, consumption of roots, and green herbage.

Remarks on the balance-sheet of 1878:—The live stock account is more favourable than usual, the sales having been made at good prices early in the year. The corn sold early also had the advantage of a better market. Hay and straw also sold at full prices. The valuation taken at Christmas of both hay and corn was at a low price, and unfavourable to the balance-sheet. Peas picked green netted £295 9s. 1d. after paying the following charges:—

	£	s.	d.
Picking ... ..	58	3	8
Railway carriage ... ..	72	16	4
Commission on selling ... ..	62	14	10
	233	14	10

It is quite certain that I could not obtain such favourable results had I not free scope to farm as I please, and dispose of my hay and straw when it paid me to do so, nor could I farm this land profitably, even at a very low rent, in its original or unimproved condition. Drainage, the absence of trees and fences, and suitable buildings, enable me to obtain a good landlord's rent, and a fair farm profit. In these days of low prices and competition, no arable farmer can make land pay without plenty of fattening and breeding stock, and its consequent abundant manure. Farmers with capital should be free and unfettered. I hope that our influential land agents will impress this on landowners. Security of tenure and a valuation for tenants' unexhausted improvements, would soon change and improve British agriculture; at present, it is, as a whole, in a most unsuitable and unprofitable condition. Security of tenure by 19 years' leases in Scotland has wonderfully encouraged improvements, and only requires the addition of an equitable valuation at the expiration of the lease. It may appear remarkable to some that I have only 6 acres of permanent pasture, and yet manage to keep, as an average, 200 sheep and from 15 to 20 cattle; but we cut all up, allow no roaming at large, and invariably give supplemental food. The sheep are always within iron-hurdled folds, removed morning and evening. Folks find fault with farming, but I find it now pay better than my London trade, which is in process of being ruined by the Civil Service Stores. The expenses remain, but the trade is gradually departing; and I am far from being alone in this respect.—J. J. MURCH.

## MR. MECCHI'S BALANCE SHEET.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—Mr. Mecchi's Balance Sheet is a nice example of book-keeping for farmers, and they ought to feel indebted to him for his frankness in presenting it; but it is curious to note how complacently he congratulates himself on his success for the past year. Let us see what reason he has for doing so.

The amount of his receipts over his expenditure is £580 16s. 1d. From this sum, rent and interest on capital have to be deducted. I have no means of knowing from the sheet the amount of either of these items, but I cannot assume the one to be less than £3 an acre, and as his valuation of stock, crop, implements, &c. on hand, is over £2,000 the amount of his capital cannot be under £3,000, and this at 5 per cent. would give the other. We then have—

Rent on 128 acres at £3 ... ..	£384
Interest on Capital ... ..	160
	<hr/>
	£534

This deducted from £580 16s. 1d. leaves £46 16s. 1d. as his income from Tiptree Hall. I doubt whether it would pay the expenses of his book-keeping. He says he has exceptional facilities too, without which he could not have shown so favourable a result. He farms as he pleases, sells what he pleases, his land is in the highest condition, and his tenure is secure. Is he not surprised that farmers without these advantages can exist?

Taking it as it stands, Mr. Mecchi's Balance Sheet is one of the saddest testimonies I have seen that arable farming under present circumstances is a miserable failure.

I am, Sir, &amp;c.,

J. B. G.

## THE POSITION OF FARMERS.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I have been supplied with the *Mark Lane Express* for more than twenty years past, but as a Free-trader and Liberal of much older date, I cannot now rest without thanking you heartily for your present efforts to enlighten the tenant-farmers, and lead them to consider that if English agriculture is to be maintained, they must exercise all their power at the next general election. I will not venture to express more on this occasion than to state an opinion that the Agricultural Holdings Act, if made compulsory, would of itself do much to improve the tenant's position. This is clearly seen by the eagerness of land agents, lawyers, and valuers, much employed by the great landowners, advising them to get the tenants to contract themselves out of it, under promise, it may be, of something equivalent in the way of a new agreement which is quietly allowed to lapse. I have a strong feeling that by the landowners in both Houses of Parliament and the present Government being chiefly supported by the County Members, this Act, embodying the very least that could be done in regard to Tenant Right, was passed in good faith; but on returning to their estates they were frightened out of it by advisers, who felt their hold on the tenants endangered.

In sending you a hasty and imperfect note like this, I would in justification introduce myself as a tenant-farmer since Michaelmas, 1889. Having earlier than that been as, I have stated, a Free Trader, &c., you may imagine my satisfaction after such a long isolation of feeling with my brother-farmers at finding my views so admirably expressed by yourself and your most clever "Sampler" in a leading agricultural journal.

I am, Sir, &amp;c.,

VETERAN.

## THE EARNINGS OF THE WORKING CLASSES.

The following is an abstract of a paper prepared by Professor Leone Levi for Mr. M. T. Bass, M.P.:—

Mr. Levi estimates that the population of the United Kingdom, which in 1871 was 31,513,000, has increased by 7 per cent., and is now 33,799,000. The number of persons engaged in various industries is a total of 11,509,000, composed of 7,891,000 men and 3,688,000 women. Domestic service, the textile manufactures, and agriculture employ 90 per cent. of all the women engaged in industry; 8,647,000 of all the men engaged in industry are occupied in agricultural and industrial pursuits. Quoting a great number of returns giving the wages earned in different occupations, Professor Leone Levi calculates the average rate of wages in the most skilled arts at 33s. and 35s. per week. It is, he says, in the nature of British industry, which consists mainly in manufactured goods and artistic products, to require much labour, and hence the greater conflicts between capital and labour in England than in other countries. The total amount of the gross earnings of the working classes of the United Kingdom, under a condition of an average amount of employment and at present rates, he has ascertained to be £500,900,000, of which men earn £390,000,000, and women £110,000,000. Deducting from this calculation 7½ per cent. for holidays and other suspensions of labour, estimated at four weeks' duration, and 2½ for the number of masters not distinguished in the census, a total of £452,700,000 remains. But another important deduction has to be made in consequence of the stagnation of trade, which has hitherto existed mainly in the textile industries, mining and metal manufactures, and that class of labourers of an indefinite character who are always the first to suffer when work is slack. He estimates the total number engaged, as here stated, at 4,934,000, earning £182,000,000. Allowing for a loss of wages in these industries to the extent of two months additional, equal to one-sixth of the yearly income, amounting in all to about £30,000,000, the earnings of the labouring classes will be reduced to £422,700,000, an amount almost equal to that of 1866, divided, however, among a much larger number of labourers. The average wages show an increase as compared with 1866 of 6 2-3 per cent. earned by men under 20; of 6½ by men at and above 20; of 12 by women under 20; of 24 by women at and above 20. It will be seen, therefore, that women's wages have advanced more in proportion than men's, this being especially the case among domestic servants and dressmakers. Taken separately, the average wages are not high, but if the total amount earned be divided among the 4,800,000 families, each of five individuals, representing 24,000,000 as the number of the labouring classes, the amount per family will be £29 per annum without the deduction for the depression of trade, and £28 with the deduction, or 36s. per week in the first case, and 33s. in the latter. Professor Levi says that in the past 12 years our labouring classes have had opportunities of setting aside a considerable amount, and there ought therefore to be no reason for the excessive distress complained of at this moment. In 1866 the total amount in trustee and Post Office savings' banks was £14,503,000; in 1877 it was £72,980,000, being an increase of £28,477,000. The amount held by friendly societies 1866 was 5,363,000; in 1874 it was £9,038,000, an increase of £3,676,000, making a total increase of both savings banks and friendly societies in ten years of £32,113,000, or an average of £3,200,000 per annum. But, says the Professor, a considerable proportion of the extra amount earned has been spent in an excessive expenditure for eating, drinking, and smoking. In no other country, he says, are the wages more liberal, but in no other country are they more wastefully used. The consumption of imported articles of food and drink per head in 1866 and 1877 shows a large increase in the latter year. In 1866 the percentage of bacon, and ham consumed per head was 2-13; in 1877 it was 8-04, being an increase of 2-77; wheat and wheat flour (lb.) in 1866 was 104-50, in 1877 it was 203-28, being an increase of 94, and so on in proportion with such articles as sugar, tea, spirits and malt. The number of paupers in receipt of relief on the 1st of January, 1878, in England and Wales was 743,703; in Scotland, May 14, 1877, 96,404; and in Ireland, the first week of January, 1878, 85,630—making a total of 924,437.

## IMPORTANT SALE OF CART HORSES.

On Feb. 12 the sale of Mr. Nix's cart horses at Outcates Farm, Alfreton, Derbyshire, was held, Messrs. Sexton and Grimwade, of Ipswich, being the auctioneers. There was a large company present, and high prices were realised. The average of 29 horses was £107 4s. 5d.

The following is the list of prices and buyers —

### BROOD MARES.

Flower, black, 9 yrs.—Mr. Rous, Leicestershire £82 19s.  
Berry, bay, 10 yrs.—Mr. Scratton, Devonshire, £110 5s.  
Lady Derwent, bay, rising 7 yrs.—Capt. Bitts, Diss, Norfolk, £157 10s.

Duchess, grey, rising 5 yrs.—Withdrawn.

### FILLIES.

Governess, black, rising 3 yrs.—T. Statter, Limerick, £76 13s.

Poetess, iron grey, rising 3 yrs.—Hon. de Vere Perry, £74 11s.

Hilda, brown, rising 3 yrs.—Mr. Morewood, Alfreton, £73 10s.

Attraction, roan, rising 3 yrs.—Mr. Ingersoll, Lewes, £74 11s.  
Flower Girl, bay, rising 3 yrs.—Mr. Chick, Dorsetshire, £60 18s.

Gipsy Queen, brown, rising 3 yrs.—Mr. R. Chambers, Lancashire, £105.

Empress, bay, rising 2 yrs.—Mr. T. Barber, Notts., £65 2s.

Heiress, chesnut, rising 2 yrs.—Capt. Bitts, £73 10s.

Princess, bay, rising 2 yrs.—Mr. Wood, Buckinghamshire, £73 10s.

Gaiety, bay, rising 2 yrs.—Hon. de Vere Perry, £53 11s.

Dowager, grey, rising 2 yrs.—Mr. Ransome, Hitchin, £47 5s.

Eva, bay, filly foal.—Mr. Radford, Manchester, £23 2s.

Baroness, bay, filly foal, Mr. Barber, Notts., £30 9s.

The Duke, black, entire colt.—Mr. Dixon, Beverley, £26 5s.

### STALLIONS.

Devonshire, grey, 13 yrs.—Mr. Hodgkinson, Derbyshire, £126.

Merryman, brown, 14 yrs.—Mr. Cooper, Belper, £15 15s.

Cambridge, bay, 9 yrs.—Mr. Ransome, £162 15s.

Lord Byron, brown, 8 yrs.—Mr. T. Brown, Marham, Norfolk, £210.

Lord of the Manor, roan, 8 yrs.—Mr. Robinson, Brigg, £136 10s.

Beauchief, bay, 7 yrs.—Mr. F. Street, Cambridge, £233 10s.

### ENTIRE COLTS.

Newland, brown, rising 3 yrs.—Mr. Chick, £357.

Four Oaks, bay, rising 3 yrs.—Mr. Ingersoll £136 10s.

Bondsman, bay, rising 3 yrs.—Mr. Woodyard, Suffolk, £120 15s.

Beaumont, chesnut, rising 2 yrs.—Hon. Coke, Longford, Derby, £141 15s.

Hardwick, chesnut, rising 2 yrs.—passive.

## THE CORN TRADE.

BIRMINGHAM, February 13th, 1879.—The English Wheat crop of 1878, although greatly in excess of the previous one and superior to it in quality, has proved only a bare average, yet the importation has been so large that notwithstanding the enormous supplies required by France and other continental countries, prices are now ten or eleven shillings per quarter below those current this time last year, and have only once during the last twenty years been so low. The stocks in the chief ports have also diminished about 600,000 quarters, but on the other hand what is called the visible supply from America is said to have increased one million quarters, and in the Black Sea ports the increase is said to be nearly equal to the diminution in this country, so that the quantity available for consumption is on the whole increased by fully one million quarters. Under these circumstances there does not seem much probability of any considerable advance at present. If it had not been for the large continental requirements, it is not easy to see what the Americans would have done this season with their surplus produce. At present, low as is the price of American Wheat, the English farmer supplies the miller still cheaper, and the proportion of Foreign Wheat now using in this district is small. As farmers get busy on the land this may alter.

Shipments from the United States to England are now moderate, but those to the continent continue large and do not

appear likely to fall off, as when the crop is deficient the demand for Foreign Wheat in that country usually increase until the end of May. From Russia, the Danubian provinces and the East of Europe generally, the exports do not increase this may be in part attributable to short crops, but mainly to the low rates current on this side.

Recent revelations show that the trade from India has been so artificially stimulated, that it is doubtful if the Wheat trade will regain the importance it seemed at one time likely to assume. At present, at least, the supply from thence is greatly diminished.

Owing to the long-continued wet Autumn, only a small proportion of the Wheat on our heavy lands is yet planted, and if to the frost now succeeds a February "fill ditch" the breadth of land under this grain must prove very small, as March will be too late to prepare the land and now, and an additional reason also is that good Barley brings as much per quarters as Wheat.

The imports of Barley have been moderate, still, owing to the cheapness of Maize, feeding qualities have ruled lower than for some years past. Oats have fallen in price quite as much as Barley, and from the same cause. The good crop, fine quality, and consequent low price of Hay have also affected the value of Oats, which are cheaper than they have been for many years. Beans and Peas alone have more nearly maintained their value. The British crop of neither was large, and we have not received the usual supply of Beans from either Egypt or Morocco. The importation of Peas has been almost entirely from Canada, and the relatively high price for feeding has caused the consumption to be very small. Of Maize the imports have been unprecedentedly large, and the price is lower than ever before, setting it is said only equal to about 4s. per quarter to the Western farmer, but the increase in the consumption has been checked by the fall in the price of pigs consequent on the extraordinary importations of American bacon, and the reduction in the number kept in the towns caused by recent sanitary regulations. Though beef and mutton are lower than for some years past, still cattle and feeding at present low prices of corn and offal must pay better than at many previous periods.—JOSEPH AND CHARLES STURGE.

**MORE THAN ENOUGH.**—Dr. Drysdale states that at the hospital with which he is connected he met a young woman passing under the name of "Enough." She was the thirteen daughter of her mother, and the father had given her the odd name. The mother of Enough, however, gave birth to ten more children, making twenty-three altogether. The porter of a well-known City club which recently collapsed was the eldest of a family of twenty-seven, all children by the same mother.

**YOUR LICENCE?**—Two men were out shooting the other day, one had a licence, the other had not. A keeper approached and the one that had a licence ran away. The keeper was a good runner, and an exciting chase ensued over about a mile and a half of nice ploughed fields. At last the keeper got up to the runaway. "Now, sir, where's your licence?" It was produced. "Then, why the—did you run away?" "Oh, I'm fond of exercise," answered the man; "But don't you think you'd better ask my friend if he has one?"

**NAGGING.**—Husband—"If I were to lose you I would never be such a fool as to marry again." Wife—"If I were to lose you I would marry again directly." Husband—"Then my death would be regretted by at least one person." Wife—"By whom?" Husband—"My successor!"

**JUSTICE.**—The Hon. Sam. Houston, when a Senator from Texas, once in a speech in the Senate related an anecdote of a Washington justice who, having heard the plaintiff's statement of a case referred to him for adjustment, proceeded at once to give judgment. "Stop, square," said the defendant, "you have not heard my side yet. Hear me before you decide!" "That is not necessary," said the austere judge; "in fact I find it positively improper to do so. You see I have been in this fix before," he went on, "and I don't like it. When I hear one side I am certain how I ought to decide; but when I hear both sides I am puzzled," and he decided accordingly for the plaintiff.

## THE MELBOURNE INTERNATIONAL EXHIBITION.

A cable message was received on Feb. 20 from Melbourne stating that the first stone of the Exhibition building was laid on Wednesday, the 19th inst., by his Excellency the Governor, amidst a very large and enthusiastic concourse of people. The Exhibition is to be opened on the 1st of October, 1880, and to close on the 31st of March, 1881. We have received a copy of the programme and regulations, from which we extract the following enumeration of exhibits to be comprised in the agricultural group:—

Examples of the farm buildings of various countries.

Examples of stables, cattle-sheds, sheepfolds, pig-sties, and of premises for rearing and fattening such animals.

Utensils used in stables, cattle sheds, kennels, &c.

Apparatus for preparing the food of animals.

Agricultural machinery in motion: steam ploughs, reaping and binding and mowing machines, hay-making machines, thrashing, finishing, and dressing machines, &c.

Specimens of agricultural works: distilleries, sugar-mills, sugar refineries, breweries, works for the preparation of flour, fecula, starch; silkworm nurseries, &c.

Apparatus for artificial hatching.

Presses for wine, cider, oil.

Alimentary products are put in a separate group, and include the following:—

Wheat, rye, barley, rice, maize, millet, and other cereals in grain and in flour.

Grain without husk, and groats.

Fecula from potatoes, rice, lentils, &c., gluten.

Tapioca, sago, arrowroot, cassava, and other fecula, compound farinaceous products, &c.

Italian pastes, semolina, vermicelli, macaroni.

Alimentary preparations as substitutes for bread, home-made paste, &c.

Other classes include meat salted, or preserved by various processes, dairy produce, eggs, vegetables, seeds, trees, plants, agricultural products not used as food, tools, &c.

Governments intending to take part in the Exhibition are requested to forward an intimation to that effect not later than the 1st of June, 1879.

In the event of no representatives being appointed by the country or colony to which an intending exhibitor belongs, he can communicate direct with the Secretary.

Applications for space should be made not later than the 30th day of June, 1879.

## THE AMERICAN CATTLE TRADE.

The New York papers report that great excitement was caused among the stock traders of the United States by the action of the English authorities, in reference to the importation of American Cattle. The superintendent of the stock yards at Chicago telegraphed to the United States Commissioner at Washington on February 3 that the action of the British and Canadian Governments was based on a misconception of the facts as reported about the prevalence of cattle disease in the western territory. The export of live cattle is worth millions to the farmers of the north-west, and the whole country felt the effect of the increase in the exports. The Commissioner, in his reply, stated that there was no more reason for the present action of the British Government in this matter than had existed for years past, as pleuro-pneumonia had never visited the cattle-breeders of the west, whence all the cattle for exportation were brought. The existence of the disease on the eastern boundary was a constant threat to the cattle-rearing country beyond the Alleghanies, and he asked the authority of Congress for its extermination. He hoped action would be taken that would remove any and all excuse for the orders of the British Government.

The following instructions have been issued by the Treasury of the United States:—

"To Collectors of Customs and others:—By department's circular of December 11, 1878, it was directed that live cattle shipped from the various ports of the United States might be examined with reference to the question whether they were free from contagious diseases, and that if found to be free from such diseases, a certificate to that effect should be given. By that circular such inspection was not made compulsory, but the certificate was to be issued only upon the application of parties interested. As the export trade in live cattle from the United States is of vital importance to large interests, every precaution should be taken to guard against the shipment of diseased animals abroad, and such a guarantee given as will satisfy foreign countries, especially Great Britain, that no risk will ensue from such shipments of communicating contagious or infectious diseases to the animals in foreign countries by shipments from the United States. Collectors of Customs are, therefore, instructed that in no case will live animals be permitted to be shipped from their respective ports until after an inspection of the animals with reference to their freedom from disease, and the issuance of a certificate showing that they are free from the class of disease mentioned. Notice of rejected cattle should be promptly given to this department. In order that this department may be fully informed in regard to such diseases in any part of the United States, Collectors of Customs are requested to promptly forward to this department any information which they may be able to obtain of the presence of contagious or infectious diseases prevailing among live animals in their vicinity. It is probable that if the disease prevails to any considerable extent it will be noticed in the local Press, and collectors are requested to send copies of any such notices to this department for its information.—JOHN SHERMAN, Secretary.

The North German Lloyd extra steamship Koeln, Captain Jungst, arrived at Southampton on February 20th, from New York, and, after landing 121 head of cattle consigned to a firm of cattle dealers in London, she proceeded for Bremen. The animals were stowed below deck, and, although the ship encountered severe weather, only five of them died during the voyage out of a cargo of 126, the remaining 121 being landed in excellent condition, and they are to be forwarded on to London to-day. In the *Times* of Feb. 19th a telegram from our Philadelphia Correspondent refers to the correspondence which has recently passed between Great Britain and the United States concerning the British restrictions on cattle importations because of pleuro-pneumonia, and mentions the American proposal rigidly to examine all shipments, allowing no diseased cattle to be exported, and the Treasury officials to give clean bills of health to the steamers before sailing for Europe. The American Government have already acted upon this proposal in the case of the Koeln, this steamer before leaving New York having been furnished with the following certificate, which is attested by Her Majesty's Consul at New York, viz:—"Collector's certificate of cattle inspection (circular No. 139, December 13, 1878).—Custom-house, New York, Collector's Office, February 6, 1879.—This is to certify that examination has been made of 126 head neat cattle, on the application of ———, intended for shipment upon the steamer Koeln for Southampton, in Great Britain, and that they are found to be free from all disease, and that there is no known disease in cattle at this port or in its neighbourhood." The requirements of the American cattle trade in the new position in which it is placed by Order in Council were again under discussion at a meeting of the Mersey Docks and Harbour Board on Thursday. The Docks and Quay Committee recommended that lairage sheds and slaughter-houses be erected between the north side of No. 2 Haskisson Branch Dock and the south side of the Canada Dock, at a cost of £9,350, and that sheds and a slaughter-house be provided at the head of the bridge of the Woodside Landing-stage (300ft. in length of the stage to be fenced off), at a cost of £3,100. The plans were sanctioned after some discussion.

OXFORDSHIRE AGRICULTURAL SHOW.—In our list of Agricultural Meetings, given on p. 190, we omitted that of the Oxfordshire Society, which will be held at Woodstock on May 21 and 22. Entries close April 9th. Secretary, Mr. T. P. Plowman, Oxford.



## LIVE STOCK AND OTHER NOTES.

The Draft Prize Sheet of the Metropolitan International Exhibition, at Kilburn, is in itself a guarantee that the competition for the large money prizes therein offered will bring together the best collection of breeding stock which has ever been seen in connection with the Royal Agricultural Society of England, or at any time, in any country. The only element of weakness we can discern in it is the danger which ~~must~~ accrue to our stock from the presence of foreign animals. We read, in Regulation 26, that special quarantine grounds will be provided by the Society, with the sanction of the Privy Council, and the animals entered for the exhibition will be required to undergo such a period of quarantine, and to submit to such inspection as the Privy Council may require under the Contagious Diseases (Animals) Act, of 1878, and the Orders issued under it. Where these quarantine grounds are to be, or what is to be the minimum duration of the quarantine, we are not informed. One thing we know, namely, that if the quarantine is to be of a duration sufficient to preclude ordinary danger from *Pleuro-pneumonia*, it will be very expensive, and not likely to be conducive to the show appearance of the animals; on the other hand, if it is to be comparatively short, the danger arising from animals brought from scheduled countries will be great to our home-bred stock. How far this will operate to the prejudice of the meeting we are not in a position to form an opinion; but as to whether cattle from France, Spain, Portugal, Holland, the Netherlands, Denmark, Schleswig-Holstein, with "other foreign breeds," and sheep from Germany, can be brought together in a Royal Show-yard without serious risk to home breeders, we are in no uncertainty whatever. We have always admitted the necessity for an arrangement by which foreign animals for breeding purposes could be introduced into this country by means of quarantine; but a collection of Continental breeds for mere exhibition is quite another matter. We think the Lord President of the Privy Council was right in the objections he urged, and Mr. Jacob Wilson's explanation a very lame one; for if the Royal Agricultural Society sanctions the offers of the Mansion House Committee it is the same thing as offering the prizes themselves, and scheduled countries are considered to be sufficiently dangerous to warrant the slaughter of their cattle at the ports of landing. It would not, of course, be within the power of the Royal Agricultural Society to admit animals from prohibited countries, so that Mr. Wilson did not meet the objections of the Duke of Richmond at all. An International Exhibition is no doubt a very good thing in its way, but in this case the risk to British stock-breeders is out of all proportion to the gain to be derived from it, on their part.

The list commences with agricultural horses. There are four classes for Clydesdale and Suffolk stallions, with prizes of £50, £20, and £10 for two-year-olds and upward, and £20, £10, and £5, for yearlings; the same for Shire-bred horses, "not qualified to compete as Clydesdale or Suffolk." The prizes for mares and foals in the three divisions are £30, £20, and £10; for fillies £20, £10, and £5; and for yearling fillies £15, £10, and £5. Pairs of mares or geldings (or one each), any breed, £30, £15, and £10; mare or gelding, 4 years old or upward £20, £10, and £5; geldings, 2 years and 4 years, £15, £10, and £5. Champion Cups of £25 each are offered in each of the horse and mare divisions of the three distinct breeds. In the hunter's section the aged weight-carriers are offered £50, £20, and £10; "up to 12 stone," £30, £15, and £10; four-year-old mares and geldings £25, £15, and £10; three-year-old mares and geldings £20, £10, and £5. Coaching mares or geldings

£20, £10, and £5. Omnibus mare or gelding £25; hackneys, roadsters, mules, and asses, £20, £10, and £5; ponies £15, £10, and £5. The ages of cattle are calculated to 1st July, 1879, and the prizes offered for Shorthorns are, for aged bulls £50, £25, £15, and £10; for two-year-olds and yearlings £25, £15, £10, and £5; for calves £20, £15, £10, and £5; for cow and heifer classes £20, £15, £10, and £5; for cow and not less than two of her offspring £50, £25, and £10; and two Champion prizes of £100 each for the best male and female, British or foreign. The Herefords and Devons have prizes of £30, £20, and £10 for aged bulls; £25, £15, and £5 for two-year-olds and yearlings; for cows £20, £10, and £5; for heifers and heifer-calves £15, £10, and £5; and two Champion prizes of £50 each for the best male and female. The Hereford breed in addition, has the offer of £30, £15, and £10 for cow and not less than two of her offspring. The Sussex breed are offered £20, £10 and £5 for bulls above two years, and above three years, and for cows; £15, £10, and £5 for heifers in milk or in calf, for yearling heifers, and for yearling bulls; £10 and £5 for bull calves, and for heifer calves; and the Champion Cups of £25 each for the male, and the best female. The Longhorn, Jersey, Guernsey, Norfolk and Suffolk Polled, Welsh, Ayrshire, Polled Galloway, Polled Angus, West Highland, Kerry, and "other British Breeds," are about on the same scale, £20 being the highest prize, except Champion Cups, but there are not so many classes in some of these breeds. There are two classes for Dairy Cattle with prizes of £25, £15 and £10 in each; one for pairs of cows and the other for single cows, and "milking properties are to be specially considered." In the sheep division there are two classes each for rams and ewes, with prizes of £20, £10 and £5, and £15, £10 and £5, respectively, for Leicesters, Border Leicesters, Cotswolds, Lincoln, Kents, Oxford Downs, Southdowns, Shropshires, and Hampshire and Wiltshire Downs; and two classes for rams and one for ewes, £10 and £5 in each case, for Cheviots, Mountain, Hardwicks, Lonks, Rylands, Devon, Somerset and Dorsets, Dartmoors, Exmoors, Welsh, Limestones, Roscommon, and "other British longwooled breeds." Pigs of large white, small white, small black, Berkshires, and "other breeds" (not eligible to compete as above) have each two boar and two sow classes, with £10 and £5 offered in both cases. There are also two classes of goats, long haired and short haired, with prizes of £5 and £3 in each case. Foreign horses, stallions and mares, one class each in each breed, are offered £50, £20, and £10, and £30, £20, and £10 respectively, for Percheron and Boulonnaise, Norman and Anglo-Norman, Flemish, "other foreign draught horses," and "foreign riding and carriage horses." Foreign cattle comprise shorthorns, with two bull classes, one cow, and one heifer class, with prizes of £25, £15, and £10 in each case; and they will be eligible to compete for the £100 Champion Shorthorn Prize with British Shorthorns. Also two classes for bulls, and one each for cows and for heifers, with £25, £15, and £5 for the former, and £15, £10, and £5, for the latter, for the Charolais, Garonnaise, Limousin, Norman, Breton, Dutch and Flemish, Swiss, Spanish and Portuguese, Anglo, Jutland, Schleswig-Holstein, and "other foreign breeds." Foreign sheep have one class each, for rams and ewes, £15, and £10 in each case, for French Merinos, German Merinos, Spanish Merinos, pure longwooled, and pure shortwooled sheep (not Merinos). And the list of the stock closes with two classes for foreign goats, one male and one female, with prizes of £8, £4, and £2 in each case. There are also prizes offered for hops, seed corn, wool, butter, cheese, hams, bacon, preserved meats, fresh meat, perry, cider, and bees. Such is the extensive and sumptuous bill of fare.

Mr. W. T. Carringsfair's two red dairy cows, Charmer and Cherry, winners with Cherry 2nd of 100 qrs. at the London Dairy Show, October, 1876, have both again calved since Christmas. They are by the same bull, the sire and dams having been bred at Croxden Abbey. At 12 years old they are blooming, and promise to milk well this year. They have each produced a live calf every year since they were heifers, and each of them has on one occasion produced twins. They have never been amiss in their lives, nor had physic, except as a safeguard at the time of calving; they have always milked freely until within about two months of calving. They furnish good examples of the combination of milking and feeding qualities, having level frames and strong constitutions rarely met with. They have run out all their lives with a large dairy herd, of which they are the acknowledged leaders, being housed only in the winter months. Their last calves are a bull and a heifer, both red in colour and by Prince Patrick (35,161), a fine bull, the winner of three first prizes at county shows, and bred by Mr. G. Hewer.

Mr. Reid, of Craiver-by-Cupen, Fife, informs us that his Shorthorn herd now contains twelve young calves, half being bulls and half heifers, chiefly to the stud bull Earl (38208) and to the young bull Bright Prince (39496). Both of these bulls are grandsons of the famous Booth bull Knight of the Shire (26352). He has also eight yearling bulls entered for sale at Macdonald and Fraser's auction, on the 12th March. They are got by Stackhouse (32591), and Bob (30353).

The *Irish Times* complains of the filthy state of the cattle lairs at North Wall, Dublin, and thinks the mud and slush through which the cattle have to walk may interfere with the proper inspection of the animals. The lairs at North Wall are not the only ones in that condition, and the remedy is paving. But asphalt or macadam, as recommended by the *Irish Times*, is bad and dangerous for the purpose. Indeed, some of the pens in the North Wall lairs are, or were, paved with one or the other; and on one occasion we watched a lot of cattle eating one of the pens in question—every animal slipping as soon as it came unexpectedly on the treacherous floor of the pen, and nine out of ten falling. There is nothing better than granite paving for cattle lairs and markets; and where there is no pavement it is impossible to cleanse such places in wet weather—or at any time.

The foot-and-mouth disease is reported to have again broken out in Eastern Switzerland, in several districts of the Grand Duchy of Baden adjacent to the Swiss frontier, and in the neighbourhood of Constance.

The wholesale price of country milk, delivered to the London Railway Termini, does not amount to more than 7d. to 8d. per gallon, net, to the producer. Yet the town dairymen charge 5d. per quart for it. Agricultural produce is much lower in price, first hand, than the consumer is aware of, and it is the profits of middle-men which press so heavily both on the producer and the consumer. Co-operation is the only remedy for this state of things.

From the *American Stockman* we learn that there is now, and is likely to be for some little time, a scarcity of cattle in their markets which are of the quality requisite to command a good return here. The quality has been falling off in late receipts, and the price at the ports of shipment has declined very considerably. 2½d. per lb., live weight being the top quotation for cattle which would dress 800lb. to the carcass, or, reckoning the entire, cost on the dressed carcass, as we unreasonably do, 43-16d. per lb. for the beef.

The price of pork has been low, but some Wall-street speculators contrived to "bull" the market for a few days, during which time, the *American Stockman* says, "pork was swiftly climbing up the scale of prices, and horns sprouted quickly where only the shaggy hide

of the bear had been seen before. Telegrams flew in every direction. Sellers asked more than their consciences would warrant—and got their price so easily they went off to hate themselves for not asking more." But a reaction soon came, and the "bears" have it all their own way again. In Kansas the price of store pigs is about 5s. 10½d. per 100lb. of their weight alive, and of fat pigs 7s. 11d. per 100lb. of their live weight. In Neosho County maize is quoted as low as 7½d. per bushel and Wheat at 2s. 6½d. per bushel. In Smith County pork is quoted at 1d. to 1½d. per lb. dressed, and beef 2½d. to 3d. per lb. dressed, 1d. to 1½d. alive. This is what the British farmer has to contend with.

Mr. John Irwin, in a letter to the journal, already quoted, prepares American exporters for a "heavy drop" in the prices of live stock, and is probably correct in anticipating "cheap meat" in the immediate future. He estimates that the "cost of getting a bullock from New York to any of our larger markets is only equal to the rent, tax, labour, &c., which the British farmer has to pay for the production of his animal," so that matters are "squared" he thinks. British farmers may not quite see with him, but all they ask is protection against the diseases of which Mr. Irwin thinks very lightly of.

Mr. Marcus Pool advises the Americans to send over bulls, to London of course, for him to sell; but his quotations are somewhat in excess of recent figures here. When all but the very best and thickest oxen can be bought for 5s. per 8lb., it is not likely that bulls will make the same price. Now that bulls and plain contractors' rubbish are getting scarce from Mr. Marcus Pool's favourite sources he courts the American trade. But American exporters know better than to send such stuff here. Nothing but the best and thickest pays, and we should be heartily glad to see the last of the Continental rubbish. They do not benefit the consumers, but keep going a class of traders who live by the handling of such cattle when consumers can get far better value for money from America.

Statements have been made to the effect that the cultivated land of America is being systematically exhausted from cropping without restoring fertility to the soil in the shape of manures. This is not unlikely to be the case, as new countries generally get to the "rye stage" from such practice; and if so it will tell in time on her resources for exporting stock, alive or dead.

Last month France bought of us 170 horses, for which she paid £10,390; all other countries only took 23, the value of which was £2,379. The total number exported was 193, and the value £12,769, or an average of about £66 per horse. In the January of last year the average price obtained was about £68 10s., while in the same month in 1877 the average was about £90 10s.

Mr. R. Reynell's roan heifer, Woodbine, of the Booth Isabella family, Killynon by St. General (31600), calved a fine roan Bull calf by Royal Baron (40617), on the 12th inst.

The Paris Fat Cattle Show came to a conclusion on Wednesday, Feb. 19, when the total receipts for admission were found to be £892. This was made up as follows:—Saturday, Feb. 15, 436 visitors at 5 f. each; Sunday, 8,765 at 1 f.; Monday, 4,000; Tuesday, 4,619 at 1 f.; Wednesday, 5,000 at 50 c. The last day was devoted to the sale of stock and produce. The fat cattle fetched prices ranging from £60 to £80; the sheep 60s. to 88s.; the pigs 180s. to 280s. The pick of the poultry were offered to the Minister of Agriculture and Commerce, while choice sherries graced the table of the Continental Hotel at the dinner given on Thursday to M.

Terserene de Bart, the chief restaurants taking other fine lots. As much as £12 was obtained for half-a-dozen turkeys, and fowls sold at proportionate rates. Implement exhibitors booked some good orders.

A banquet was given at Paris on Tuesday, Feb. 18, by the French Society of Agriculture. The Marquis Dampierre, who presided, passed a eulogium upon Mr. C. B. Pitman, the delegate of the Royal Agricultural Society of England, and reminded those present of the services rendered by England to France during, and after, the misfortunes of 1870, and on the occasion of the revictualing of Paris. He asked Mr. Pitman to become the interpreter to foreign agriculturists of France's sentiments of gratitude. The banquet at the Trocadero, at which the agriculturists of Europe assembled in a feast of brotherly love, had left in the hearts of the French agriculturists an imperishable recollection. He drank to the health of Mr. Pitman, and those who displayed such warm sympathy with France in the days of her misfortune. Mr. Pitman, replying to the toast in the name of the foreign members, said:—"It is impossible not to see that we are passing through a very grave crisis. The future of French Agriculture will depend in great measure upon the manner in which the difficulties to be encountered are solved. The time has gone by for agriculturists to allow themselves to be brigaded under the deceptive standard of Protection, and the broad and enlightened spirit which animates the Society of French Agriculturists will not become the champion of a doctrine which has for ever been condemned. Thanks to Free Trade, the resources of France and England have increased upon an incalculable scale, and a temporary crisis must not make us forget the principles upon which repose the commercial greatness of the nations which put them in force. It behoves the two countries to unite in order to secure the triumph of a system which is based upon common sense and justice. England attaches all the greater value to Free Trade because the ties of sympathy, which bind her to France, have become so close that nothing henceforth can rend them asunder."

M. Pouyer-Quertier, who replied to Mr. Pitman, spoke in a Protectionist sense. He said he was a partisan of Free Trade, but only from the English point of view. He acknowledged the fact and ability of England in the treatment of her own affairs, but pointed out that other nations had their own private interests to consider, and that France was obliged to protect hers, which were not identical with those of England. M. Pouyer-Quertier concluded by saying, "I propose to drink the health of Mr. Pitman as the representative of England. England has all my sympathies; let her acquire the habit of consuming our products instead of drinking our wines, and then we will willingly practise Free Trade."

This speech was much cheered.

At the last meeting of the Illinois State Board of Agriculture it was decided to hold another fat-stock show in Chicago early in November.

The Department of Agriculture at Washington gives the following summaries of its figures on the United States crops of last year. The corn (maize) crop is 30,000,000 bushels in excess of that of 1877. Of oats there is a somewhat larger crop than the heavy yield of 1877, constituting it the largest ever raised in this country. There is no material change in barley. Rye is one-sixth larger than in 1877. Potatoes foot up 40,000,000 bushels. The cultivation of sorghum is receiving increased attention, and the result of the year's culture is satisfactory. Grapes, apples, and pears show a greatly decreased yield.

Our Canadian correspondent writes, under date of Feb. 3rd:—Certain cute individuals on this side, in their

capacity of guides and philosophers for the British public re matters Canadian, go on the same lines as Canning's, Mynheer Von Dutchman. They ask far too much—faith illimitable in fact—and they give far too little, nothing, indeed, save bare assertion, as a ground for belief. At times I have been disposed to think these gifted idealists must nearly have run out their tether. But when somebody succeeds in imposing on the untutored British intellect, per the London Times, the marvellous fiction that 250,000 beeves and 500,000 sheep are now stall-feeding "in Ontario" for the English stomach in 1879, I cease to limit the illimitable, and endorse the Napoleonic apothegm *Toujours l'audace!* The Times is clearly a Christian paper. Good for evil is the motto of its conductors. No English paper has been, and is, so constantly abused by organs of the professional immigration-promoters here and other interests. It is frequently held up as a standing enemy of "Canada," as the cliques dub themselves. No doubt there is some object in launching this special fable at this juncture, which time will show. It is certainly made for a purpose. Probably its concoctors had wind that disease had broken out among American beasts, and, foreseeing this exclusion or pretended exclusion of United States beeves from Canada, desired to make the English public believe we had that preposterous number of native animals ready, so that in the event of the necessity of smuggling in Jonathan's cattle, they might the more easily pass muster.

If this be so, events which have happened since my last have partly justified their calculations. On the 14th ult. Messrs. T. Crawford and Co., cattle-dealers, Toronto, shipped from that city to Liverpool, via Montreal and Portland, a cargo of "Canadian" live-stock—just such a lot as have been shipped a hundred times before, viz. animals principally bought at Buffalo, &c. Had things gone smoothly these beeves would, as usual, have been received in Liverpool, and been chronicled in the English newspapers, per Mr. Dyke, the Canadian Emigration Agent at Liverpool, as "another extensive consignment of Canadian cattle," and nobody on your side would have been any the wiser. But pleuro-pneumonia of a virulent form is present in the States; in fact it prevails extensively in Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, Maryland, Delaware, and Columbia Districts, and is described in the reports of the Washington Agricultural Department just submitted, as being "almost as dangerous as rinderpest." In this state of things, with American and Canadian jobbers located at Toronto, compassing the length and breadth of the States for cattle to ship to England from Canada, it was inevitable disease would more or less quickly appear in said pretended "Canadian" consignments. Consequently when the cargo of the Toronto firm, sent per *Ontario* on the 14th Jan. arrived at Liverpool, the port-inspector found pleuro-pneumonia prevalent among the cattle, and necessarily condemned them to be slaughtered. The British Government, acting as the circumstances necessarily required, prohibited the further landing of American cattle at British ports. This has created much excitement amongst the jobbers here. The *Globe* in particular, owned and controlled by the head of a cattle-raising association, has been endeavouring, with large-typed cablegrams and sensational paragraphs and leaders, to make the public regard it as a national affair. But truth compels me to say the scare is confined to about half-a-dozen export firms, and to the forwarders who get freight on the American beasts in transit over Canadian routes to Portland or Halifax. The farmers do not take any interest in the matter. They have little or nothing to export. Indeed, they are now calling for a large duty to shut out American cattle importations—a demand opposed by the *Globe* on the remarkable and significant

plea that to stop the ingress of United States beasts into Canada means the summary extinction of the "Canadian" exports to Britain! No doubt this avowal in correct. But what, in view of it, becomes of the tales of the agents, and of the 250,000 beasts assumed to be "now feeding" in Ontario stalls? A meeting of the Canadian Privy Council was convened at short notice, in consequence of news received from England, and an Order in Council was passed excluding "for three months" the importation of American cattle into Canada, or their passage through it. Our dealers here seem to have succeeded in convincing the English Privy Council that under this order the importation of live "Canadian" cattle into England may safely go on. The American stock they have on hand, and the native beasts now fattening in the Toronto and other distilleries, will perhaps serve to keep them going till the end of April, and *in vacuo* should the embargo on American stock be continued after the three months are over, I reckon that the Canadian and United States dealers, putting their heads together, will find a frontier of 1,800 miles permits of developments suited to the exigencies of the situation.

Dr. McEachren, the dominion expert here, despite the insinuations of the *Toronto Globe* that a Liverpool Inspector "chose" to declare a "slight cold" pleuropneumonia, in order to minister to English prejudice against cattle exports, entirely agrees with the action of the British Government.

The wool clip of 1878 in the State of California, according to the report of Messrs. E. Griser and Co., of San Francisco, as published in the *Pacific Rural Press*, amounted to 40,862,061 lb.; there remaining on hand December 31, 1,400,000 lb. The reduction in values from which the whole country has suffered, has been felt to only a moderate degree as yet in this State. Choice Colonial wools were lately sold in London at about 15d. average, Cape at 10d., and fair to inferior descriptions at lower rates; of course the net results to the grower are somewhat less. In comparison with Colonial wool at 15d., even northern spring California at 12½d. is very dear, and between Cape wool at 10d. and northern lambs clip at 8d. there can be only one opinion as to which is the most valuable. The production of the colonies and at the Cape is increasing, while growers in California say they cannot afford to raise wool at present rates.

The figures given last year by the *New York Industrial Review* represent the production of Californian wool from 1874 to 1877 inclusive, as follows:—

Year.	lb.	Year.	lb.
1874	175,000	1866	7,220,950
1875	360,000	1867	9,626,188
1876	600,000	1868	14,801,256
1877	1,100,000	1869	17,253,370
1878	1,428,000	1870	19,460,565
1879	2,376,000	1871	23,687,000
1880	3,260,000	1872	24,235,000
1881	4,600,000	1873	32,155,000
1882	5,750,000	1874	39,358,781
1883	7,600,000	1875	43,532,223
1884	8,000,000	1876	56,550,970
1885	7,721,000	1877	53,110,742

The following are the official returns of exports of beef, mutton, and live stock, from the United States, from Oct. 1, 1878, to Dec. 31, 1878:—

## FRESH BEEF.

	lb.
Liverpool	10,269,362
London	1,336,680
Glasgow	1,355,880
Other ports	557,850
Total	13,519,472

## MUTTON.

	lb.
London	71,250
Other ports	2,250
Total	73,500

## LIVE STOCK.

## SHEEP.

	head.
Liverpool	9,331
London	2,298
Glasgow	1,931
Hull and Bristol	2,375
Other ports	2,509
Total	18,444

## CATTLE.

	head.
Liverpool	9,875
London	2,298
Glasgow	511
Hull and Bristol	1,711
Other ports	4,170
Total	19,165

## HORSES.

	head.
Liverpool	155
London	3
Hull and Bristol	5
Other ports	208
Total	371

The committee appointed at a meeting of gentlemen representing the dairy interest, held at New York on Dec. 6th, to form a constitution, &c., for an International Dairymen's Fair Association, met on the 14th ult. The committee was composed of twenty-one gentlemen from different parts of the Union, and they submitted a constitution and bye-laws, which were laid over until the following day for consideration. This constitution provides that the Association shall have its head-quarters and principal offices at New York city. Its officers consist of a President, sixty Vice-Presidents, a Secretary-Treasurer, and fifty-one Managers, to be elected annually, on the second Tuesday in February. At the next day's meeting, the constitution and bye-laws were adopted, but with trifling amendments. The meeting then proceeded to elect a President, and Mr. F. B. Thurber, New York, was chosen.

The fourteenth annual convention of the American Dairymen's Association met on the 14th ult. Rather a small number of delegates were present, and very little business was transacted. At the evening session, papers were read by T. D. Curtiss, of Utica, on "Profit and Loss in Dairying;" by W. L. Rutherford, on "Jerseys for the Dairy;" and by Solomon Hoodie, on "Holsteins for the Dairy." The papers were all full of interest to dairymen, and were discussed at some length.

The *Prairie Farmer* states that the December report of the Department of Agriculture at Washington, just issued, shows 51,000,000 acres in corn for 1878, as against 50,300,000 for 1877. Kentucky, Illinois, Missouri and Kansas and the Atlantic States show a falling off. The North-Western States show a decided increase. The crop of 1878 is larger than that of 1877 by 80,000,000 bushels. The oat crop is in excess of even the remarkable crop of 1877, and there is no material change in the barley crop except in California, which is double that of 1877. The rye crop is in excess of 1877, showing a total of 16,000,000 bushels. The potato crop for 1878 is 124,000,000 bushels, as

against 177,000 bushels, a falling off of 53,000,000 bushels. The hay crop is 20 per cent. less than that of 1877.

We have advices from New South Wales to 2nd of December. The *Sydney Mail* says that the summer season, which opened a few days before the close of the old year, has so far proved mild and most agreeable. High winds and average summer temperature have been the prevailing characteristics of the weather throughout the colony during the past fortnight. These have been slightly varied by thunderstorms, which brought down welcome showers. Several stations have been enabled to register rainfall, but in no instance has that fall been heavy. Despite this, however, the country of Cumberland has been well favoured this year, and looks charming. The dairy districts along the Southern coast are again blooming. Bega, which was quite parched, has revelled in good heavy showers, and its pasture again is vigorous. The accounts from Moruya and Ullalulla are also cheerful. The reports from Manaro are satisfactory. In Tumut the late rains have done great good and very little damage. The corn crops are doing well, but the tobacco fields are suffering from the peculiar disease known as mildew. The grain crop of Wagga Wagga has been almost all garnered, and the yield, we regret to say, will be but meagre. Had it not been for the low price paid for hay, 30s. per ton, many acres of wheat would have been mown. The heat has been severe in Albury, but the farmers have been favoured through the season. The vineyards of this district show an excellent growth. Slight attacks of oidium have been successfully combated by a few applications of sulphur. Harvesting is in progress throughout the west, and reports from all districts in this quarter continue to be hopeful. The northern coast has received a fine rainfall, and all its districts look well. The New England and Liverpool Plains districts have received light rains, and are in a promising condition, and in conclusion it may be said that the year opens with bright prospects for agriculturists.

Reports from the principal pastoral districts speak of fairly conditioned stock and good pastures.

Advices from South Australia to December 28th state that red rust had made very rapid progress in many parts of the Colony, and the crops then being harvested were very disappointing in many districts. It is too early yet to form any reliable estimate of the general yield.

From Victoria the accounts are conflicting, but on the whole, worse even than those from South Australia. From Queensland reports are more cheerful, and harvest was everywhere progressing rapidly.

The Colony of Queensland has now formally revoked the Order of April 13th, 1876, which prohibited the importation of cattle, sheep, and pigs, from the United Kingdom, and her ports are now open to our live stock, subject to conditions of quarantine.

Our New Zealand correspondent writes under date Province of Auckland, January 7th: "No rain to speak of having fallen during the past month pastures are now much burnt up, and stock in many districts are very short of food. On the Scoria lands around Auckland this is particularly observable, and severely felt by the dairy farmers who supply the town with milk and butter, and the cows have almost gone dry with those who neglected to provide a few acres of green corn for such an emergency. In the Interior cattle are much better off; grass still retains a certain amount of verdure, and not being so heavily stocked, and the surface consequently

covered and thus protected from the sun, a plentiful bite is still afforded for stock of all kinds. With this slight drawback, the weather has been truly delightful in every other way; as, although the sun's rays have been powerful during the day, the solar heat has almost invariably been tempered with a cool sea breeze, which rendered the afternoons and evenings extremely enjoyable. Harvest is just now at its height, and, favoured by the weather, great progress is being made in clearing the fields. In many districts farmers are at their wits' end to procure sufficient labour to keep the reaping machine going, and high wages must be given to induce people to go into the harvest-field. Ten shillings a-day and found is the rate in many districts, and glad to get them at that; and even "Maories" are offered 8s. a day and their food as an inducement to them to give up their easy-going ways for a time, and assist in saving the crops. Almost the only machine used is the manual delivery, all, or most of all, being of American construction, and although the combined reaper and binder both of Wood and McCormick, have been introduced this year for the first time, neither has made much progress, nor have they as yet been even looked upon favourably by the farmers, who object to the wire, fearing that the very name of having used it might injure the sale of their chaff, the whole of the straw or nearly so being cut up in this country for horse food. The wheat crop in cutting up shows unmistakable evidence of the injurious effect of the very wet seed time, as on almost every field there are a good many thin patches, which will reduce the average yield considerably. Unless on the very fine land in the interior, newly drained and possessing all the elements of natural fertility still untouched, thirty bushels to the statute acre will be as much as can be expected, and light soils long cultivated, without receiving any external aid by the application of bone dust or other manure, will not go over twenty. The oat crop has been all cut for hay, in which state it pays best, as it brings a high price during the winter and spring months, the superior quality of the green oats chaff enabling the wheat chaff to be cut up and mixed with it, and still make excellent provender, highly relished and cleanly eaten by horses. The straw being got rid of in this way forms a great addition to the monetary return per acre from the wheat, and enables it to be grown with some prospect of a profit, where the grain alone would scarcely clear the expenses. The high wages to workmen swallow up a very large portion of the farmer's receipts, and will apparently do so for many years to come, and but for his being in a position to utilise his straw in this manner, and altogether discard the use of farm-yard dung, he would be forced to give up cropping altogether, and let his land lie in pasture, a primitive and inexpensive mode of farming, which is not without drawbacks of a nature peculiar to itself. Clover and meadow hay has been saved in splendid style, the weather having been so favourable, and is all ricked and securely thatched in nearly every part of the country, the greatest care being shown by every one in the preservation of what food they have for the winter, dry fodder being all they have to depend on. With the sun so strong, but little trouble was experienced in saving the hay crop; the horse-rake followed the mower almost immediately, and much of the crop was in permanent ricks, of goodish size too, on the third day after being cut, and gave no trouble afterwards by heating. Porters have done much better than could ever have been anticipated from the severity of the weather while planting, and the crop is moderately good and the quality simply faultless. On the whole farmers seem in good spirits, and if labour was more plentiful the development of the country would proceed rapidly now that the interior is being opened up by good roads and railways.

A national agricultural society for the middle island of New Zealand has been formed, to be called the Royal Agricultural Society of New Zealand. The Hon. M. Holmes, who presided at the meeting called to form the Society, said "We have now in the colony 13,069,338 sheep, 578,430 cattle, and 137,768 horses; and besides the natural pasture we have 3,523,277 acres of English sown grasses upon which to feed them. There are 26,205 holdings in the colony, and the land cultivated extended in 1877 to 226,354 acres wheat, 204,254 acres oats, 21,795 acres barley, and 18,875 acres potatoes. The crops for the present year promise well, and indicate a return of about 14,000,000 bushels. These results speak volumes for the industry, enterprise, and ability of the people, but this is merely a prelude of what may be expected in the future.

### A COLORADO SHEEP RANCHE.

A writer in the *American Agriculturist* thus describes a Colorado sheep ranche:—"There is a novelty and charm about this life which attracts very many from the older States, and one is constantly discovering in the rough herder's garb, men of education and culture. They are fond of the freedom and exhilaration of this mode of existence, which also promises health, wealth, and adventure. Very many of the herders or hired men are fresh from college; youths who are serving their apprenticeship in the occupation sheep-raising. Others come here from the Eastern and Middle States to engage in mining operations. They are unsuccessful, become straitened for money, and take to herding because herders are in demand. Their wages vary from 15 dols. to 30 dols. a month and board, according to capacity and experience. Many not only remain with their sheep during the day, but sleep near them in corrals at night, as protection against wolves. On three successive nights since we have been here, these wolves have made a descent upon the corral, killing several lambs. In the early days of Colorado sheep-raising, the herders were accustomed to camp with their flocks wherever night overtook them. This, however, was found to be a dangerous practice, inasmuch as the sudden storms of the Colorado plains would blind and scatter the sheep, and often lead to great loss. Sheep invariably go before a storm. Sometimes they cannot be checked, but will push on to certain destruction. We recall one instance where three thousand sheep in Southern Colorado, overtaken at night by a sudden storm, blindly followed their leader over a precipice, and perished in the waters below, not one escaping. Now the ranchmen have their sheep corralled at sunset, instead of keeping them out on the plains. Though generally manifesting but little intelligence, they invariably display much sagacity in wending their way toward the corral, which they know will afford them protection against wolves, and keep them warm and comfortable. The sheep soon come to know the herders, and manifest as much affection for them as sheep are capable of. It is not well, however, to have them become too tame, because they hang back and do not drive well. The thrifty owner has his sheep out of the corral and upon the plains by daylight. They feed until about ten o'clock, then 'bunch up,' or form a compact mass, until four o'clock, and from then they feed until driven in at dark. They eat gramma, buffalo, wire, and bunch grass. Wild hay is cut and stacked for feeding in winter, so that they may not want for food should there be a heavy fall of snow. The herders generally have horses of their own, which subsist on prairie grass, are very much attached to their owners, and become wonderfully skilled in managing sheep. Give them the rein and they will gather in

and keep the flock together with as much dexterity as the shepherd's dog who accompanies them. The dog is an essential part of the 'outfit,' being a companion to his owner, and exercising a constant vigilance for the safety of the flock. Herder, horse, dog, and sheep together make a very picturesque appearance as they move over the plains.

"The flocks, comprising Mexican sheep and their increase from Merino bucks, generally number from 1,000 to 3,000. During the winter the larger flocks are generally divided in order to insure better feeding and better protection. One herder can readily manage 2,500 sheep, but he has to have his wits about him constantly. The leader of a flock is generally a Mexican goat, whose prowess is recognized by the whole herd, and whose prominent figure enables him to be easily seen both by the sheep and the herder.

"The Mexican sheep, as a general thing, are purchased about the first of October. The bucks are turned in with them in December, and the lambing season begins about the middle of May. Shearing begins about the first of June. The Mexican sheep shear from two to four pounds, and improved sheep from four to eight pounds. Of course there are exceptions; for example—the Willard Brothers, at their shearing match last year, clipped thirty-two and one half pounds of wool from one Vermont ram, which brought twenty cents a pound. In shearing sheep great care must be exercised not to begin too early, on account of late storms. The shearers are paid from five to eight cents a pound for their work. One man can shear from twenty to seventy sheep in a day. Mexican wool brought last year from sixteen to twenty cents a pound (prices are much less this year), according to the absence or presence of 'kemp,' a hairy, valueless substance. As sheep improve, the quantity of kemp gradually diminishes. The fleece of the native Mexican sheep is a coarse carpet wool, but as the flocks are improved by the introduction of Merino bucks, the quality of the wool is improved, until many of the ranchmen now claim that it is fully as good as that grown in the Eastern States. They further maintain that when their improved sheep become dissociated in the public mind from the native Mexicans, their wool will justly command as good a price as is paid for Eastern fleece. Owing to the scarcity of water, sheep are rarely washed in Colorado, and it is stated that many tons of dirt are annually shipped east in the Colorado fleece. Until recently, the ranchmen disposed of their wool to local dealers and agents. Two years ago they began to consign it to New York, Boston, Philadelphia, Hereford, and other Eastern houses. The main disease among the sheep is scab, which is due, like the itch in man, to a minute mite, and may be communicated from one animal to another. The treatment is, to dip the sheep in some liquid that will destroy the parasite; the dipping apparatus costing from 50 dols. to 100 dols. The principal dip is composed of tobacco, sulphur, and sometimes arsenic and soap. Three men can dip twenty-five hundred sheep a day. Scab does not affect the wool itself, but causes the sheep to lose wool, often to a considerable extent.

"While sheep-raising presents so many attractions, it is no child's play, as many coming here from the East learn to their sorrow. Drones cannot succeed in this better than in any other business. Money, muscle, and brains are required to achieve success, and the idea that owners can live in the East, and safely trust their flocks to the management of others here has been rudely dispelled. One has got to be upon the ground, and superintend his own ranching operations, if he expects to prosper. Upon coming to Colorado, to engage in sheep-raising, a man should hire himself out as a herder, in order to learn the details. No man should embark in the business

until he has had some experience. He should be here during the three seasons, that is : lambing, shearing, and dipping. At the end of that time he will have a very fair insight into the workings, although it would be advisable for him to pass a winter here, and have an experience with one of the heavy storms. He must not take the advice of any one man, but form his judgment after conversing with various sheep-raisers. He must expect to invest not merely money, but his time and brains. He must expect to give his personal attention to the business, not simply for one or two years, but for five or ten years, until he gets his herd sufficiently well graded to bring in a fair income from wool. He will find the stories of ranchmen to differ in many particulars. Two years ago five thousand dollars was regarded as the usual amount required in purchasing a complete sheep 'outfit'—that is, a ranch, horses, dog, sheep, and bucks. He should start with about one thousand Mexican sheep, which can be purchased of dealers at Denver, and almost anywhere else. They sold two years ago for two dollars to two and one half dollars each. They can be purchased this autumn for from ninety cents to one dollar and fifty cents each. The Vermont bucks will cost him from twenty to fifty dollars apiece. There should be one buck for every fifty sheep.

"He will not be required to pay anything for his land, which belongs to the Government. Generally the buildings and ranch franchise can be purchased of some one, who, for various reasons, wishes to make a change. If the new owner locates on a new range, he will have to build a dug-out or an adobe house, and must have a wagon, a span of horses, and a shepherd dog. The corral with accompanying shed should be built as soon as possible. If he has his family with him, he should purchase the needed household furniture here. The rates of freight are so high that as few effects as possible should be brought from the East. He should employ a herder to watch the flocks, while he himself keeps close guard over the bucks. He must make up his mind to be absent from the ranch only a few hours at a time during any season.

"In selecting a range, wood and water are the great essentials. It is for this reason that the ranches through Colorado and the other Western States and Territories are generally located along the streams and river bottoms."

## THE ROYAL AGRICULTURAL COLLEGE AND PROFESSOR CHURCH.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I have had my attention drawn to the "Sample" in this week's *Express* relating to the Cirencester College and Professor Church, and I am glad that at length some one of influence has had the courage to speak the truth plainly. In commenting on the subjects which your remarks have brought into prominence I will speak first of the College.

It is quite true, as the "Man of Mark Lane" says, that the College no longer exists for the benefit of those for whom it was established. When the late Principal died the College was flourishing under the able and practical tuition of such men as Coleman, Voelcker, and Brown, who were not mere servants of the Principal, but Professors responsible to the governing Council; the farm was then attached to the College, and Mr. Coleman was at once Professor of Agriculture and Farm Manager; and, though last, not least, the College was full of students, the great bulk of whom were intended to be *bona fide* farmers. Not long afterwards the Professors threw up their appointments, and the College fell from a height of usefulness and popularity which it has not since attained.

At the present time, and for many years past, theory has been lifted up and practice neglected; the farm is disconnected from the College, and the Professorship of Agriculture is an anomaly. There is not an inch of land over which the Professor has control; he is not, without permission of the tenant of the farm, in a position to carry out even the simplest experiment; and practical work for the students on the farm has a name to live while it is dead. The Principal, it is true, has some land in his own hands, on which he plays some strange agricultural pranks at times, but even over this the Professor has no authority, and his advice respecting it is not even asked except when a mess has been got into. The students—the great bulk of them, that is—are not the sons of farmers, nor are they intending to be farmers. Hence the agriculture of the country receives but an infinitesimal amount of benefit from an institution whose sole *raison d'être* is the advancement of the practice and theory of scientific agriculture. The farmers of England are shrewd in their day and generation; they do not send their sons to the College.

Now for Professor Church. It is understood far and wide that the Principal has taken advantage of the Professor's approaching marriage to get rid of him, and I think I can throw a little light on this. Professor Church is the last of the Professors who held their appointment directly from the Council. By some means or other best known to himself the Principal some years ago induced the Council to grant him plenary power in the College, and even the Professors are precluded from communicating with the Council except through him. Hence it is that no complaints have reached the Council's ears. Over the other Professors the Principal exercises unbounded sway, but over Professor Church he does not, for the reason above stated. Hence Professor Church is a stumbling-block in the Principal's path, and hence also the reason for his removal. "But," you will say, "the Principal has not the power to remove Professor Church; that rests with the Council." True enough this; but when the Principal says he cannot remain except as a *resident* Professor, and as a man cannot very well have his wife with him inside the College, we know what the inevitable result must be, and we trace the cunning move. "But what," you will ask, "are the Council doing all the time?" The Council, so far as active interest in the College is concerned, exist in name rather than in reality. Were the Council alive to their duties, the Principal would not venture to treat the students as if they were so many schoolboys, and the Professors as if they were pupil-teachers in a National School; and it is to be hoped that the period of passive acquiescence on the part of the Committee of Management in the acts of the Principal is at length drawing to a close. Professor Church has served the Council well and faithfully for sixteen years, and they are bound in the interests of fair play to thoroughly investigate a case which has already become a far-reaching scandal.

I am, Sir, &c.,

ONE WHO KNOWS.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I was very much surprised on reading in last week's issue the "Sample" referring to the Royal Agricultural College. Wherever the name of the College is known, that of Professor Church is known also; and I quite agree with your "Man of Mark Lane" that this gentleman has done more for the College than anybody else. He stands in the very front rank of our agricultural chemists, and his course of instruction in agricultural chemistry at Cirencester is simply invaluable. He has spent the best years of his life in forwarding the interests of the College, and during that time he must have

acquired an amount of knowledge and experience on agricultural matters such as very few other men possess. The loss to the College by his resignation would be irreparable, and it would be a great misfortune for the institution were Professor Church to give up the chair which he has so long and so honourably filled. No official of the College, from the highest to the lowest, could be less spared than he.

I am, Sir, &c.,

J. K. N.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—The first "Sample" in your issue of the 17th seems to call for remark from those who are interested in Cirencester College. The "Man of Mark Lane" *believes* this and has his own opinion of that; but your readers would probably like something more. They would like, for instance, some good evidence of the principal item of news which is almost incredible. One can easily understand that Professor Church after so many years of work might wish to give up his connection with the College; but that the College should wish to lose his services—this is incredible. I have good grounds for believing that Professor Church is retiring in consequence of his approaching marriage. (This indeed is stated in a circular I have received from the College). Now it is absurd to suppose that the Council should dismiss a professor simply on account of his marriage—especially as there are and have been married professors attached to the College. Your readers have therefore good reason for asking either for a contradiction of the statement that Professor Church is leaving against his own free will, or for authoritative evidence in support.

I am, Sir, &c.,

AGRICOLA JUNIOR.

### THE LAW OF DISTRESS.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I was glad to observe that at the last meeting of the Essex Chamber of Agriculture, Sir J. F. Buxton in the chair, a discussion on the Law of Distress for rent was resumed, and a resolution passed to the effect "That in the opinion of the Chamber the Law of Distress was injurious to the best interests of the landlord, unjust to the tenant, and deceptive to the trader"—a most excellent resolution truly. Can there be a doubt that ere long the Law of Distress will, like imprisonment for debt, be altered; but it must be moved for. Prior to the Bankruptcy Act, 1869, a creditor, having obtained judgment for a debt of £20 or upward, had the option by a warrant on writ of *capias ad satisfaciendum* of arresting the defendant or of taking his goods by a warrant on a writ of *lien facias*, but happily there is now no such option, inasmuch as a defendant cannot be so arrested for debt, but the Law of Distress remains unaltered, consequently a landlord, his agent, or bailiff, can, the day after the rent becomes due, rush into the house of the tenant without giving any notice whatever, and leave there an individual whose presence is not likely to contribute to the happiness of the family; whereas if the landlord had only the same remedy to recover rent as the trader—and it is most unjust to the trader that the landlord has priority, which generally ends in the whole effects being absorbed for rent and large expenses—the tenant would in all probability, by selling his produce to the merchant or dealer, be able to continue his tenancy, to save his reputation, avert the invasion of his "castle," and the harrowing scene occasioned by the aforesaid individual being left, as it were, in the bosom of the family. It is to be hoped for the sake of tenant-farmers that the other Chambers of Agriculture which have not considered the subject will do so at once.

I am, Sir, &c.,

A SUFFERER.

Camb, February 18th, 1879.

## Agricultural Reports.

### BEDFORDSHIRE.

Unfavourable seasons, poor yields, and low prices, with increased outgoings of late years, have placed the British farmer in a very unenviable position. Many are no longer able to continue their holdings, while others are retiring from an occupation which has of late been so unremunerative. Much of the poor clay land has during the last few years become very foul and out of condition, and must, unless there is a very great change in farming prospects, go out of cultivation. Although there must be many sufferers from this state of things, yet good will eventually follow. The necessity will be felt by many who have hitherto ignored it, that if capital is to be attracted to the soil greater security must be given that "he who sows will be able to reap." Agents will see the necessity of removing those needless and vexatious restrictions which have hampered many a good tenant, and will, we believe, only be too anxious to introduce liberal and equitable agreements. If not they may rest assured the time will speedily arrive, when the opportunity will be no longer afforded them. Beyond carting manures, very little has been done on the land since the commencement of the frost in December; since it broke up we have had a great downfall of rain, all the low lands being very much flooded. Field operations are therefore in arrear and much anxiety is now felt to be getting on with the work, spring sowing must necessarily be late. There is a smaller breadth of wheat sown than usual, much of which—although planted in October—has only just made its appearance. The frost has thinned some of it, and winter beans when sown late have become perished. Swedes and kohlrabi have also suffered, many not being secured in consequence of the frost setting in early. Kohlrabi are somewhat difficult to store, for besides a tendency to decay when chopped off from the root, the sacrifice of the tops would be considerable. The season has been unfavourable for sheep doing well at roots; the weakly ones of the flock have succumbed to the severity of the weather, many losses being the result. In several parishes there have been a good many men out of work who, we fear, have had a punishing time of it; the dissatisfied spirits among them have had time to reflect upon the line of conduct they thought well to adopt a year or two since. Adverse times have taught them as well as others most salutary lessons. There is evidently, we rejoice to record it, a much better feeling pervading the men, and we shall hail with much satisfaction a return of those times when the labourers gave cheerful service, and felt an interest in the welfare of their employers.—Feb. 20.

### NORTH ESSEX.

We are in the fourth week of February, which is well sustaining its character, as we have had, and still have, a considerable fall of rain and snow, drains and ditches being alike full, while a great deal of low-lying land is under water. In the more easterly part of this county the moisture is very much needed in the mixed and light soils, owing to the unparalleled dryness of the land previous to the setting in of winter, a great deal of such land being still quite dry at a depth of six or seven inches below the surface. All tillage work is very greatly in arrear, as the frost came upon us before some of the backward farmers had completed their ordinary breadth of wheat planting, since which time the land has either been too frost-bound or too wet for the plough to work. Here and there we hear of some still to be sown, which if it were our case we should hesitate to do, seeing that wheat is less profitable than barley. The completion



of wheat sowing being late naturally caused fallow ploughing to be neglected, hence we see a large quantity of land with the stubble standing on it, instead of being ploughed down, and taking advantage of the late frosts. It is almost needless to say that in consequence of the delay pea and bean sowing is scarcely thought of at present, and apparently some patience will have to be exercised before the drill can be properly put to work; while we see no chance whatever of an early barley sowing—almost a necessity in this part if a fair quality is expected—as the frost, instead of leaving the land dry and pliable, has been succeeded by a degree of moisture which will require either an exercise of patience or a considerable increase of horse labour, before this seed should be placed in the ground. The wheat is for the most part above ground; some of the early pieces are looking green, while the later sown show a very good line of rows are the stretches. Some apprehension has been felt by farmers during the long sustained frost for the safety of the plant, such being happily dispelled by a generally uniform and strong plant. Upon examining some the other day, I found it remarkably well rooted, and the points at which the second series of roots take place is particularly stout, being a sign of tillering power; of course it is premature to form any opinion of the wheats as they are now only as forward as they usually are in December, very much depending on the weather we have in March. Turnips and all roots which are left exposed in the land have disappeared like magic, most being rotten, and those not rotten have little or no feeding properties; *ergo*, much dry food in the form of hay, corn, and cakes has to be supplied to keep sheep up to the mark, or the other ruinous alternative has to be submitted to—of sending the hoggetts to market at a heavy loss. The cattle market at Colchester last Saturday presented a dismal aspect, fat beasts selling at 6½d. to 7d. per lb., or only £1 or £2 more than they cost at Michaelmas, while capital hoggetts, which were worth 60s. per head a month since, were begging for buyers at 48s. The causes for such a reaction are not far to seek, viz., the sudden collapse of the root crops, the low price of wool, the falling off in the consumption of meat, the large supplies from America, and the want of money. No kind of work is forward at the farm except thrashing, and that certainly is not in arrears, many stackyards being quite guiltless of corn. Cloverseed thrashing has been very general, and the seed yields well but sells badly, a great deal of useful seed going for a guinea per bushel. Plenty of farms, many being very useful, to let in all districts, landlords applying for tenants; the table is turning.—W.D., Feb. 22.

### SOUTH NORFOLK.

There is no pleasure in writing on farming matters, for never was agriculture in all its branches in such a depressed condition. On all sides we hear of farms to be given up at Michaelmas next; indeed, in one parish not a hundred miles from the market towns of Diss and Attleborough, it is said that seven will be vacant. Many persons will, I fear, be compelled to retire from agricultural pursuits altogether; even some of the well-to-do farmers talk of retiring into private life. Taking all things into consideration, the prospect of a good realization for live and dead stock at Michaelmas next is by no means reassuring. The past winter has been a most unpropitious time for farmers, and it certainly has seemed as if "the stars in their courses have fought against (the agricultural) Sisera." The constant wet weather of the latter part of October, and the whole of November, prevented much of our land from being sown with wheat. Leading mangel was performed under the greatest difficulties, and many were left on the land to be spoiled by

the frost, and some of those carted into holes could not be banked up in time to save them from being pierced by "Jack Frost's" poisoned dagger. At the beginning of December, when the earth was clothed with but a slight covering of snow, "Mr. Frost" again put in an appearance, and this time in earnest, being accompanied by piercing winds. Continuous weeks of severe weather cut our young wheats to such a degree that they have not even yet recovered from the shock; they look shy, thin, and backward. The swedes and turnips were also seriously injured, and many fields are covered with rotten bulbs, which are useless, nay, perhaps dangerous for feeding purposes. During the severe weather, all stock were fed at a great expense; much work, necessarily requiring extra hands, in order to provide the animals with sufficient food, little else could be done, the frost having set in so early that little or no keep was prepared for them, so that what with short days and extra hands, after stock, this has been an exceptionally expensive winter for the farmer. Work is very backward, the constant wet weather having prevented the ploughs from being stirred. Heavy land is dotted over with pools of water and beds of slush; if, therefore, we have not a favourable change, John Barleycorn will, I fear, have to commence life in a cold uncomfortable bed. I would not recommend a hypochondriacal man to visit our corn markets as a cheerful recreation, as he will see nothing but long faces there, farmers having to rest satisfied with from 8s. to 10s. 6d. per 4 bushels for about one-half of their barley crop. Neither is a visit to our cattle markets by any means conducive to cheerfulness, fat bullocks, after high and expensive feeding, making but little more than they cost in as stores. Hoggets in times past, the Norfolk farmer's salvation, and rent-payers, are now a bad "spec," many of them not being worth so much money as they cost as lambs. We can only say—What will the end be?—R., Feb. 21.

**THE YEAR 1878.**—In the year 1878 there were 1,152,525 births registered in the United Kingdom, being at the rate of 34 per 1,000 of the estimated population, which was 33,891,986 in the middle of that year. The deaths registered in the United Kingdom in 1878 were 716,165, or 21·1 per 1,000 of population. The natural increase of population by excess of births over deaths was 436,360, or 49,242 less than the excess in 1877. The actual increase of population in 1878 cannot be ascertained, owing to there being no complete records showing the balance between emigration and immigration. The Board of Trade report the emigration from the United Kingdom in 1878 of 113,437 persons of British origin, being an increase of 25 per cent. over the annually small emigration of 1877. The increase in 1878 was 22 per cent. in English, 34 in Scotch, and 27 in Irish emigrants. Of the 113,439 British emigrants of 1878 there were 54,065 who left for the United States, 36,057 for the Australian colonies, and 10,697 for British North America, each of these numbers showing a marked increase over the preceding year. The mean temperature of 1878, as shown at Greenwich Observatory, exceeded the average in every one of the first ten months of the year, but there was a marked deficiency in November and December. The mean for the year was 49·7 deg., or 1·2 deg. above the last 37 years' average. The rainfall in Greenwich in 1878 amounted to 29·2 inches, measured in 166 days; this rainfall exceeded the average by nearly 4in. The number of hours of bright sunshine registered at Greenwich Observatory in 1878 was 1,360, or 28 per cent. of its possible duration, the sun being above the horizon for 4,454 hours.—*Times*.

**ORIGIN OF MILK.**—An agricultural paper asserts that milk comes through inheritance. Mebbe it does, but some of it looks as if it had come through a thunder shower with the lids of the cans open.

## REVIEW OF THE CORN TRADE,

FROM THE MARK LANE EXPRESS FOR THE WEEK ENDING FEBRUARY 24.

The weather during the past week has not on the whole been favourable for the prosecution of agricultural labour, as, although some sunny intervals have occurred, a considerable quantity of rain and snow has fallen, leaving the surface of the land sticky and unworkable, and more than ever in need of dry penetrating March winds. Outdoor labour of all kinds is consequently still in arrears, and the country generally presents a backward aspect, the natural development of vegetation being held in check by the prolonged wintry temperature. There is very little change to call for remark in the state of the autumn-sown cereals, which have made slight progress by reason of the ungenial character of the weather. Scotland has again been visited with some severe snowstorms, and winter seems loth to yield his sway over these islands. Farmers continue to thrash out their wheat very freely, although the incentives to their so doing have not been very apparent, as neither weather nor prices have favoured the supposition that the labour expended would prove remunerative. Complaints as to quality and condition are still rife both in the London and provincial exchanges, and the offerings, large as they have been have represented but a very small proportion of really fair milling grain. An average price of 38s. 1d. against 50s. 11d. at the corresponding time last year gives some insight, were any needed, of the hard times English farmers have had to endure, and at the same time offers strong presumptive evidence of the decreased acreage which will probably be put under wheat this season. Business has not, however, been without a certain modicum of firmness during the past week, as an advance of 1s. per qr. on sound home-grown wheat has taken place in a few of the country markets. As soon as the weather offers reasonable facilities for Spring tillage we may expect farmers' deliveries to show a considerable diminution, when the trade will probably see, and should certainly maintain, an improvement of some few shillings per quarter. The arrivals from abroad have been light of all articles except Flour, last Monday's return showing only about 26,000 qrs. of foreign wheat, while the subsequent supply up to Friday has not reached 16,000 qrs., and has consisted chiefly of American produce. It is the unusually large visible supply in America which hangs like an incubus over the British trade, and prevents prices from rallying now that Russia is sending us nothing. The course of business throughout the week has been quiet, but certainly steady, and although speculation is wanting consumption continues, so that prices have been fully maintained for all descriptions of wheat. In the case of Russian varieties, the increased demand brought to bear upon them for mixing purposes has resulted in an advance of 6d. to 1s. per qr., and the upward movement should certainly make further progress now that the northern ports are

closed and native grain marketed in such deteriorated condition. Sales, it is true, have not been very numerous, but the tendency has been towards a rise rather than a fall, and the trade has less much of the languor and listlessness which have been its prevailing characteristics for some months past. Rather higher rates have been demanded for Maize, and the inquiry has been thereby checked, but this article occupies a firm position at the low prices now current. Barley, oats, and other varieties of feeding corn has ruled dull, but in the limited amount of business passing late rates have been maintained. The sales of English wheat noted last week were 2,239 qrs., at 37s. 7d.; against 42,406 qrs., at 51s. 3d. in the previous year. The London averages for the week ending Feb. 22nd were 39s. 8d. on 1,214 qrs. The imports into the United Kingdom for the week ending February 15th were 873,776 cwt. of wheat, and 180,525 cwt. of flour. There was a fair attendance of millers and dealers at market on Monday last, and with light arrivals from abroad of all articles, except flour, a somewhat steadier tone was observable in the trade, albeit the actual amount of business done was quite moderate. No fresh feature of special interest was developed, but the improved demand and hardening prices which characterised the trade for Russian wheat during the preceding week received further support. The week's arrivals of English wheat were 7,117 qrs., and the supply fresh up on factors' stands was again light, the bulk of the offerings consisting of damp and ill-conditioned grain. Fine samples, owing to scarcity, maintained previous currencies, but secondary qualities were neglected, and remained unsold at the close of the market. The total imports of foreign were only 26,260 qrs., of which quantity 21,076 qrs. were from the United States, 2,666 qrs. from New Zealand, and the remainder from Australia and the East Indies. Holders asked rather higher prices for all varieties, but the inquiry was slack, and it was only in the case of fine Russian descriptions that buyers consented to an occasional advance of 6d. per qr. Sales were mostly in retail, but the market closed with sufficient steadiness. The week's exports were 3,503 qrs. The supply of barley consisted of 11,004 qrs. of home-grown, and 79 qrs. of foreign. Malting descriptions were in fair request, but grinding sorts ruled slow, and there was no quotable variation in either. There were 6,778 qrs. of maize, and all sound corn on spot was fully as dear, while to arrive quotations were the turn in sellers' favour. Oats, with arrivals of only 3,257 qrs. from Prince Edward's Island, met a retail inquiry, and prices were no better than on the previous Monday. On Wednesday the return showed 520 qrs. of English wheat and 11,860 qrs. of foreign. A decidedly steadier tone pervaded the trade, and Russian and Indian descriptions met an improved demand at an advance

of fully 6d. per qr. from the recent lowest point. There was, however, no corresponding improvement noticeable in feeding corn. On Friday the supply had increased to 1,110 qrs. of English wheat and 15,920 qrs. of foreign. The market was fairly attended, and a quiet but steady trade was done in wheat at Wednesday's prices. Feeding stuffs were also fairly steady. The imports of flour into the United Kingdom for the week ending February 15th, were 180,525 cwts., against 141,526 cwts. in the previous week. The receipts into London were 15,926 sacks of English, and 4,012 sacks and 16,382 barrels of foreign. Country sacks have fully maintained last week's prices, and there has been more inquiry for American barrels, sellers in some cases having obtained 6d. more money. The trade, however, has not been very active, as stocks and supplies are alike large. The week's arrivals of beans were 4,024 cwts., and of peas 609 cwt., showing a decrease of 8,048 cwt. on the former and 8,280 cwt. on the latter. Both articles have sold slowly, and no appreciable change has occurred in values. The deliveries of malt were 18,068 qrs. and the exports 1,305 qrs. There is still a desire shown to press sales, but, in spite of concessions offered, buyers have operated very sparingly. Business in agricultural seeds has not been quite so active during the past week, but a brisk demand may be looked for as soon as the weather becomes drier. English red cloverseed is marketed freely, but choice parcels are scarce, and command relatively high prices. With the exception of some small stocks of American there is scarcely any foreign red offering. White clover and alsike are unaltered in value, but trefoil has given way slightly. Hemp and canary have moved off slowly at the low prices ruling for these articles, but Egyptian lentils have fully maintained late rates. The country markets have been well supplied with home-grown wheat, and the condition continues very unsatisfactory, but a fairly steady tone has, nevertheless, characterised provincial trade, last week's prices having been maintained both for wheat and spring corn. At Liverpool, on Tuesday, the market was well attended, and an improved demand was experienced for wheat at an advance of 1d. per cental. Flour was also in good request, and supported last week's currencies, but barley, oats, and beans, were inactive, although not quotably cheaper. Maize eased slightly, owing to more abundant offerings. The week's imports included 77,000 qrs. of wheat and 29,000 qrs. of Maize. At Newcastle there has been but little demand either for wheat or flour, although prices have not given way. Maize has ruled steady, and other feeding stuffs dull, at about late rates. At Hull, English wheat has improved 1s. per qr., but there has not been much business done in foreign; and at Leeds the trade has been quiet, but prices have shown a hardening tendency. At Edinburgh the market has been well supplied with grain from the farmers, and a better demand has been experienced for wheat at last week's prices. Barley has likewise met a free sale at 1s. per qr. more money, but oats and beans remain unchanged. At Leith the weather has been cold, and a good deal of snow has fallen. The frost at night has also been severe. The ar-

rivals from abroad have been moderate of all articles, and the trade has ruled quiet but firm for both Scotch and foreign wheat at the full rates of the previous week. Maize has been steady, and all descriptions of barley in better request, but no alterations can be noted in values. At Glasgow the week's imports have been light, and at Wednesday's market wheat met a steady sale at an advance of 6d. to 1s. per qr. Flour also realised full prices, and Scotch barley was fully 1s. per qr. dearer, but maize, beans, and peas, were unaltered, and oats' the turn cheaper to sell. At Dublin the weather has been cold, and a great deal of rain has fallen. There has been more demand for wheat and an advance of 6d. to 1s. per qr. has been established. Maize has also been in fair retail request, but prices show no quotable improvement. At Cork the rainfall has been heavy, and a quiet tone has prevailed in the grain trade. A light retail inquiry has been experienced for wheat, the millers have only bought to supply their immediate wants. Maize has been a turn easier, the demand for consumption being still very moderate.

The following are the reports from Mark Lane during the past month:—

Monday, Feb. 3.

The trade in Mark Lane to-day was very mature, sale<sup>d</sup> in retail being mostly at former quotations. The weather was rainy.

Last week's supplies included English Wheat 5,323 qrs., which were pressed on buyers on former terms, at which they were neglected. Foreign Wheat, 33,133 qrs., were firm for finest sorts, whilst holders of secondary accepted occasionally 8d. to 6d. per qr. less money.

Barley: 2,617 qrs. English, 6,635 Scotch, 3,853 qrs. foreign, was steady in price except for inferior English samples.

Malt, 18,478 qrs. English, 1,453 Scotch, kept at old rates.

Oats, 824 qrs. English, 151 Scotch, 64,847 foreign, were generally 6d. per qr. dearer, some sorts made 1s. over last Monday's terms.

Rye, Nil, was quiet in supplies and value.

Beans, 1,626 qrs. English, 7 qrs. foreign, were in fair retail demand, at former quotations.

Peas: English 720 qrs.; foreign 566 qrs. Made an occasional 6d. to 1s. per qr. advance.

Maize: 341 qrs. transhipped from English ports; 15,760 qrs. from abroad, including 6,100 qrs. from San Francisco. Was firm in price and steady in demand.

Tares: English, 122 qrs.; foreign, 450 qrs. Were in fair request and rather dearer.

Flour: English, 18,322 sacks; foreign, 8651 sacks, and 2,985 brls. Was neglected, quotations unchanged.

There were some 150 qrs. of Lentils brought into London last week.

Monday, Feb. 10.

The arrivals during the past week have been: English Wheat 6,870 qrs.; Scotch 325 qrs.; foreign 36,385 qrs. There was a fair supply of English Wheat at market this morning, but nearly all the samples were in bad condition and only the few dry lots offering were saleable at previous prices; of foreign the arrivals were moderate and with a large attendance of millers a somewhat improved demand was experienced particularly for fine Russian descriptions at last Monday's currencies.

Country Flour 18,655 sacks; foreign 10,418 sacks, and 9,953 brls. The trade ruled slow for both sacks and barrels, but quotations underwent no alteration.

English Barley, 2,929 qrs.; Scotch, 2,693 qrs.; foreign, 10,349 qrs. Exports, 1,212 qrs. Sales progressed slowly, and to move any quantity a slight reduction had to be submitted to for both malting and grinding sorts.

Malt, English, 15,830 qrs.; Scotch, 880 qrs. Exports, 1,598 qrs. A dull trade at about late rates.

Maize, 22,423 qrs. Sound Corn on spot was in fair request at about last week's prices, but there was little done to arrive.

English Oats, 353 qrs.; Scotch, 239 qrs.; foreign, 21,081 qrs. Exports, 13 qrs. A moderate demand was experienced, although the trade was scarcely so firm as on Friday last, and all descriptions have improved about 3d. per qr. on the week.

English Beans, 955 qrs.; foreign, 60 qrs. The turn cheaper to sell with only a moderate inquiry.

Linseed, 7,255 qrs. A steadier trade at an advance of 2s. per qr.

Monday, Feb. 17.

The arrivals during the past week have been: English Wheat, 7,117 qrs.; foreign, 26,260 qrs. Exports, 3,508 qrs. There was a small supply of English Wheat at market this morning, and the condition of the offerings was again unsatisfactory; last Monday's prices were obtainable for the few dry lots shown, but inferior parcels were almost unsaleable. Of foreign the arrivals were small, and with a fair attendance of millers a steady trade was experienced at fully late rates.

Country flour, 15,926 sacks; foreign, 4,021 sacks, and 15,382 brls. Business was dull for both sacks and barrels, and last week's currencies were barely supported.

English Barley, 2,694 qrs.; Scotch 8,310 qrs.; foreign 79 qrs. Malting descriptions ruled steady, and grinding sorts met a slow sale at unaltered values.

Malt: English, 16,808 qrs.; Scotch, 1,760 qrs. Exports, 1,305 qrs. The trade was very quiet and prices were the turn in buyers' favour.

Maize, 6,778 qrs. Exports 111 qrs. Sound corn on spot was fully as dear, while to arrive, prices ruled the turn against buyers.

English Oats, 372 qrs.; Scotch, 1,820 qrs.; foreign, 3,257 qrs. The foreign arrivals being light, a fair inquiry was experienced for all descriptions, at last Monday's quotations.

English Beans, 750 qrs.; foreign, 67 qrs. In moderate request and unaltered in value.

Linseed, 10,973 qrs. Exports, 745 qrs. Steady at late rates.

Monday, Feb. 24.

The arrivals during the past week have been:—English Wheat, 5,167 qrs.; foreign, 21,844 qrs. Exports, 2,893 qrs. There was a good attendance of buyers at market this morning, and the general tone of the trade betokened increased firmness. The supply of English Wheat was small, and the few samples in fair condition were saleable at an advance of 1s. per qr. on the week; of foreign the arrivals were also small, and a good milling demand was experienced at a similar improvement.

Country Flour, 16,931 sacks; foreign, 16,612 sacks and 15,116 barrels. Country sacks were the turn dearer, but barrels, notwithstanding a better inquiry, only commanded late rates.

English Barley, 3,609 qrs.; Scotch, 1,864 qrs.; foreign, 543 qrs. Business was wanting in animation, and no change was observable in either malting or grinding descriptions.

Malt: English, 19,763 qrs.; Scotch, 1,000 qrs. Exports, 768 qrs. The trade continues in a languid and depressed state; values have declined 1s. per qr. on the week.

Maize, 26,882 qrs. This article has shown a drooping tendency, and with liberal supplies prices have given way 3d. to 6d. per qr. for both round and flat corn.

English Oats, 784 qrs. Scotch, 140 qrs. Exports, 1,022 qrs. Considerable steadiness has characterised the trade, and, with no arrivals from abroad, prices are fully 6d. per qr. dearer since last Monday.

English Beans, 1,318 qrs.; foreign, 7,331 qrs. Steady, but without quotable change.

Linseed, 4,239 qrs. Fully as dear.

#### CURRENT PRICES OF BRITISH GRAIN AND FLOUR IN MARK LANE.

	Shillings	per	Quarter
WHEAT, Essex & Kent, white.....	old	—	new 34 to 46
	red	old	—
Norfolk, Lincoln., and Yorksh. red	old	—	new 32 43
BARLEY .....	Chevalier	new	36 68
Grinding .....	Distilling	—	30 36
MALT, pale.....	new 63 to 78	old brown	52 84
RYE .....	—	—	30 34
OATS, English, feed 20 to 24 .....	Potato	—	24 28
Scotch, feed .....	Potato	—	—
Irish, feed, white 24 .....	Fine	—	—
Ditto, black .....	Potato	—	—
BEANS, Masagan .....	—	—	—
Harrow .....	Ticks	—	35 38
PEAS, white boilers 36 .....	Mapple 37 to 39	Grey 34	36 36
FLOUR, per sack of 280lbs., town households .....	—	—	35 40
Best country households .....	—	—	30 35
Norfolk and Suffolk .....	—	—	28 30

#### FOREIGN GRAIN.

	Shillings	per	Quarter.
WHEAT, Dantsie, mixed .....	45 to 50	extra	— to 52
Konigsberg .....	48	50	extra
Rostock .....	43	50	old
Pomera, Meckberg., and Uckermark .....	—	—	44 48
Ghirka 38 to 41 .....	Russian, hard, 43 to 46	Saxonska 43	44
Danish and Holstein, red .....	—	red American 40	48
Chilian, white 46 .....	Californian 44 45	Australian 48	50
East Indian, No. 1 Club white, 42 to 43 .....	No. 2 40	—	41
Ord. white 38 to 40 .....	red 36 to 37	hard 38	38
BARLEY, grinding 20 to 22 .....	distilling .....	—	28 35
OATS, Dutch, brewing and Poland 20 to 23 .....	feed 19	—	21
Danish and Swedish, feed 17 to 20 .....	Stralsund .....	—	21
Canada 60 to 60 .....	Riga 15 to 16	Petersburg .....	16 20
BEANS, Friesland and Holstein .....	—	—	—
Italian .....	34 to 37	Egyptian .....	35 36
PEAS, feeding and mapple .....	35	fine boilers .....	36 37
MAIZE, Black Sea .....	24	Mixed American 23	24
FLOUR, per sack, French 32 .....	Spanish, p. sack 34	—	36
Hungarian, per sack .....	41	American barrel 18	28
TARES, Spring .....	—	—	30 34

#### BRITISH SEEDS.

Mustard, per bush., brown 10s. to 13s., white .....	8s. to 11s.
Canary, per qr. ....	new 46s. to 47s. .... fine .. 48s. 50s.
Cloverseed, fine red and dark purple 90s., com .....	60s. 61s.
Coriander, per cwt. ....	22s. 24s.
Tares, winter, new, per bushel .....	4s. 6d. 5s. 6d.
Trefoil, fine new .....	21s. 26s.
Ryegrass, per qr., old and new .....	23s. 24s.
Linseed, per qr., sowing 66s. to 68s., crushing 63s. ....	55s.
Linseed Cake, per ton .....	£9 10s. to £10 0s.
Rapeseed, per qr. ....	new .. 60s. 66s.
Rape Cake, per ton .....	25 to 25 10s.

#### FOREIGN SEEDS.

Coriander, per cwt. ....	22s. to 24s.
Cloverseed, red 56s. to 64s., white 76s. ....	80s.
Hempseed, small 32s. to 34s. per qr. ....	Dutch 36s. 38s.
Trefoil .....	20s. 22s.
Ryegrass, per new Italian Bale of 2 cwt. ....	33s. 34s.
Linseed, per qr. ....	Baltic 61s. to 62s. .... Bombay 60s. 61s.
Linseed Cake, per ton .....	£9 10s. to £9 15s.
Rape Cake, per ton .....	25 to 25 10s.
Rapeseed, Calcutta .....	62s. 64s.
Caraway ..	3 11s. 35s.

#### FLUCTUATIONS in the AVERAGE PRICE of WHEAT

PRICE.	Jan. 18.	Jan. 25	Feb. 1.	Feb. 8.	Feb. 15.	Feb. 22.
39s. 1d.	...	...	...	...	...	...
38s. 11d.	...	...	...	...	...	...
38s. 4d.	...	...	...	...	...	...
38s. 1d.	...	...	...	...	...	...
37s. 7d.	...	...	...	...	...	...

## LONDON AVERAGES.

Wheat.....	1,319 qrs.	39s. 8d.
Barley.....	330 ..	34s. 11d.
Oats.....	— ..	—s. 9d.

## IMPERIAL AVERAGES

For the week ending Feb. 22, 1879.

Wheat.....	56,550½ qrs.	37s. 7d.
Barley.....	43,619½ ..	34s. 10d.
Oats.....	4,694½ ..	20s. 3d.

## COMPARATIVE AVERAGES.

Years.	WHEAT.	BARLEY.	OATS.
	Qrs. s. d.	Qrs. s. d.	Qrs. s. d.
1875 ..	53,654½ ... 40 11	41,248½ ... 42 11	5,172½ ... 29 7
1876 ..	46,278½ ... 43 3	49,281½ ... 33 4	4,137½ ... 24 7
1877 ..	42,731½ ... 50 1	49,108½ ... 40 4	5,480½ ... 25 7
1878 ..	42,495½ ... 51 3	44,709½ ... 44 0	8,241½ ... 24 1
1879 ..	56,550½ ... 37 7	43,619½ ... 34 10	4,694½ ... 20 3

## AVERAGES.

	Wheat.	Barley.	Oats.
	Qr. s. d.	Qr. s. d.	Qr. s. d.
Jan. 4...	37,991 39 7	44,708 38 10	2,207 20 3
— 11...	37,400 39 7	52,423 38 11	3765 20 1
— 18...	52,141 38 11	66,095 38 11	4422 19 8
— 25...	55,791 38 1	63,236 37 5	3871 20 1
Feb. 1...	55,334 38 4	62,43 36 9	4049 19 6
— 8...	63,736 38 1	66,981 35 7	5127 20 0
— 15...	62,439 38 1	50,532 35 5	4340 19 2
— 22...	66,550 37 7	43,619 34 10	4694 20 3
Six weeks' Average	38 4	38 2	19 9
Same time in 1878..	51 7	44 4	24 2

CORN IMPORTED AND EXPORTED  
FOR THE WEEK ENDING FEB. 15.

	Imported into			Exported.	
	Engl'd.	Scotl'd.	Irela'd.	British.	Foreign.
Wheat.....	Owts. 724072	Owts. 73715	Owts. 75689	Owts. 14973	Owts. 4913
Barley.....	43039	5800	...	327	...
Oats.....	33490	...	...	282	...
Rye.....	...	120	...	441	...
Pears.....	3599	435	...	...	...
Beans.....	322052	19139	121005	...	401
Indian Corn.....	40	...	...	...	...
Buckwheat.....	...	...	...	...	...
Total.....	1131781	102490	196994	16022	5344
Wheat Flour.....	105882	73788	1055	332	401
Oat Meal.....	3090	1900	...	113	...
Ryemal.....	11	...	...	...	...
Indian Corn Meal.....	372	...	...	...	...
Total.....	109155	75888	1055	445	404
Grand Total.....	1240936	178187	198049	18487	5748
Malt.....Qrs.	...	...	...	1390	...

## Hide and Skin Markets.

LONDON, SATURDAY, February 23.

MARKET HIDES	s. d.	Horsehides, each	s. d.
56 to 64lbs.	2½ to 3½	Calfskins, light	2 0 to 2 0
64 to 72lbs.	0 3½ to 0 3½	Full	7 0 to 0 0
72 to 80lbs.	0 3½ to 0 3½	Sheep Skins, India	6 0 to 6 0
80 to 88lbs.	0 3½ to 0 3½	Kents and half-breds	6 0 to 6 0
88 to 96lbs.	0 3½ to 0 3½	Lambs	0 0 to 0 0
96 to 104lbs.	0 3½ to 0 3½	Do	4 0 to 5 8
104 to 112lbs.	0 0 to 0 0	Togs	6 0 to 6 0

## Covent Garden Market.

LONDON, THURSDAY, February 20.

Trade is quiet, calling for no alteration in the fruit market. Vegetables are easier.

## FRUIT.

Apples, ½ dozen...	s. d.	Malons each.....	s. d.
Apples, ½ dozen...	0 0 to 0 0	Oranges, per hundred	4 0 to 5 0
Figs, per dozen...	0 0 to 0 0	Peaches, ½ dozen	0 0 to 0 0
Filberts & Oats, ½ B	0 0 to 0 0	Pears, per doz.	4 0 to 5 0
Grapes, ½ lb.	0 0 to 0 0	Pine Apples, ½ B	1 0 to 2 0
Lemons, ½ hundred	3 0 to 3 0	Plums, ½ sieve	0 0 to 0 0

## VEGETABLES.

Artichokes, per bus.	0 0 to 0 0	Horseradish, ½ bund.	4 0 to 5 0
Eng. Globe, per bus.	2 0 to 4 0	Lettuces, per doz.	1 6 to 2 0
Jerusalem, per b.h.	0 0 to 0 0	Cos Eng., scarce	1 6 to 2 0
Asparagus, sp. bun.	1 6 to 2 0	Mint, grn., per bunch	1 6 to 2 0
Eng., per 100	15 0 to 15 0	Onions, ½ bushel	4 0 to 5 0
Fr., ½ lb. bun.	3 0 to 3 0	Young, ½ bundle	0 0 to 0 0
Beans, Fr., ½ 00	2 0 to 2 0	Parsley, per lb.	2 0 to 3 0
— broad, per bus.	10 0 to 10 0	Pears, green, per qt.	12 0 to 12 0
Seet, per d. s.	0 0 to 0 0	Potatoes, n.w. French	1 6 to 2 0
Bruss. & Sprouts, bah.	10 0 to 10 0	— Jersey, per lb.	0 0 to 0 0
Cabbages, per dozen	1 0 to 2 0	Radishes, per bunch	0 1 to 0 2
Carrots, ½ bunch	0 4 to 0 4	Spanish, per doz.	1 0 to 1 0
New Fr., per bun.	0 0 to 0 0	New Jersey, per doz.	2 0 to 2 0
Caustiflowers, per doz	2 0 to 2 0	Rhubarb, per bundle	10 0 to 10 0
Celery, ½ bundle	3 0 to 3 0	Salsify, ½ bundle	0 0 to 0 0
Chilies, per 100	2 0 to 2 0	— Senkals, per punnet	2 6 to 3 0
Green, per doz.	0 0 to 0 0	Shallots, ½ lb.	0 6 to 0 6
Cucumbers, each	0 0 to 0 0	Spinach, per bushel	0 0 to 0 0
Custard Mar., doz.	0 0 to 0 0	Sweet Potatoes, per lb.	0 0 to 0 0
Endive, per doz.	1 0 to 1 0	Tomatoes, per dozen	2 6 to 3 0
Savarian, per doz.	1 0 to 1 0	Turnips, ½ bun.	3 0 to 3 0
Garlic, per bunch	0 0 to 0 0	New, per bunch	0 0 to 0 0
Herbs, per bunch	0 0 to 0 0	—	—

Potatoes:—Regents, 100s. to 130s.; Champions, 80s. to 100s. Rocks, 70s. to 72s.; Flukes, 120s. to 140s. per ton. Large supplies, and trade heavy.

## Hay Markets.

WHITECHAPEL (Saturday last).—A short supply of Hay and Straw was on sale to-day. There was a dull trade, except for best Clover, which is scarce and rather dearer. Prime Clover, 85s. to 105s., Inferior ditto, 80s. to 90s. Prime Meadow Hay, 75s. to 84s., Inferior 40s. to 70s., and Straw 30s. to 35s. per load.

WORCESTER (Friday last).—Old Hay, £3 10s. to £4 new £2 15s. to £3; Straw, £2 5s. to £2 13s. per ton.

BIRMINGHAM (Monday last).—Hay, £3 5s. to £4 5s. per ton; Straw, 2s. 6d. to 3s. per cwt.

## Fertilizers.

	s. d.	s. d.
Gaano, Peruvian, 10 to 12 am.	per ton 11 10	0 to 13 0
Do. High Phosphate.....	7 13 3	8 0 0
Bone Ash, River Plate.....	6 0 0	6 2 6
Linseed Cake, American, thin oblong, prime, in bags.....	0 0 0	0 0 0
Cottoncake, N.A., decorticated, super., Do English, undecorticated, in bulk	5 17 6	6 0 0
Phosphate Lime, 75 to 90 per cent pr. unit	0 0 0	0 0 0
Nitrate of Soda, prime	per cwt. 0 13 0	0 13 3
Linseed, Bombay	per qr. 2 3 0	2 10 0
Niger	1 18 0	1 19 0
Gloverseed, N.A., n.r., f. to g.	1 18 0	2 1 0
Tallow, superior North's	0 0 0	0 0 0
Super. of Lime, g'ood, 26 to 28 sol., bulk	3 2 6	3 5 0
	35 to 37	4 7 6

SAMUEL DOWNES AND CO., General Brokers,  
No. 5, The Albany, Liverpool.

Cereal Manure, for Wheat, Barley, Oats, &c.	per ton 11 10	0 to 13 0
Manure, for Beans, Peas, Tares, &c.	11 10 0	11 10 0
Wheat Manure, for Autumn Sowing	12 10 0	12 10 0
Soluble Guano	12 10 0	12 10 0
Angold Manure	12 10 0	12 10 0
Electric Manure	12 10 0	12 10 0
Turnip Manure (best quality)	12 10 0	12 10 0
Dissolved Bone	12 10 0	12 10 0
Superphosphate of Lime, best quality	12 10 0	12 10 0

PRENTISS BROS.,  
Agricultural Chemical Works, Stowmarket, Suffolk.

Special Concentration Top Dressing for Wheat, Barley, Beans, Peas &c. (per Ton)	12 10 0
Ammonia Fixed Guano	11 10 0
Mangold and Potatoe Manures	10 15 0
Special Dissolved Bone	7 10 0
Dissolved Bone (best quality)	6 0 0

LANGDALE'S Chemical Manure Co's (Limited),  
123, Dunstons House, Mark Lane.

Printed by HAZELL, WATSON, &amp; VINEY, 265, Strand, London.





*Tom King.*

*A high jumper, all over the property of J. H. Bouchon, former Bay of Hellenes, (Richmond, Devon, and Cornwall, both Australia)*

*Engraved by the artist & printed at the Victoria, N.S.W.*

# THE FARMER'S MAGAZINE.

APRIL, 1879.

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## PLATE.

### T O M   K I N G .

A PRIZE TWO-YEAR-OLD CART COLT, THE PROPERTY OF R. BOUCHER JAMES, E Q., HALLSANNERY, BIDEFORD, DEVON, AND CANOWIE, SOUTH AUSTRALIA.

Tom King, bred by Mr. T. Statter, is by King Tom, by Honest Tom, out of Maggie by Columbus, and a rich bay with a blaze of white in the face and one white heel. He is a well-made colt, of great power, and free from lumber throughout, beginning with a good head and neck, running into deep well-laid shoulders, good middle and loins with strong quarters and nicely formed limbs and feet. Tom King is a very gay horse when out, carrying his head well up with capital action, no dwelling or flourishing, but striking out straight, right and left, in a style that would keep any awake who tried to walk alongside him. He was only shown as a yearling and won the following prizes:—Second at Doncaster, Addington, Oldham, Rochdale, and Bury; first at Halifax, Worsley,

Ormskirk, Southport, Todmorden, and Chaddington.

He is now on the sea bound for Adelaide, and, provided Daddy Neptune does not claim him on the way to cross with some of the descendants of Trident and Terra, he will do the distant land good service in propagating the breed of Honest Tom, King Tom, Maggie and Columbus. It is almost unnecessary to say that Honest Tom was the best prize cart stallion of his day, and that King Tom and Maggie have had their fair share of honours, while Tom King has shown that he is worthy of his ancestors and the name of the Champion of the Prize Ring. Good speed and adieu to thee, Tom King!

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## C O U N T Y   B O A R D S .

By the introduction of the new County Government Bill, as explained by Mr. Selater-Booth in the House of Commons on March 18, the Government have scored another failure to add to the long list of their abortive measures. It may be that with the aid of their well-drilled majority they will be able to pass the Bill through Parliament; but we venture to predict that, if they do, it will be a failure nevertheless. In many respects it is a weaker measure than that of last year, and altogether it is far more unsatisfactory. Under it the members of the County Boards will have much less power, and less work to do, than they would have had under the Bill of last year. The only improvements which we have noticed are the adoption of Mr. Read's recommendations that the

OLD SERIES.

Board should consist of two-thirds of the members elected by the Guardians, and one-third by the magistrates, instead of half and half; and that the Board will be elected to sit for three years. These recommendations were endorsed by the Central Chamber of Agriculture, and their adoption is so far an advantage. But they effect only small improvements, which are far more than outweighed by the retention under more or less modified forms of some of the worst features of the previous Bill, and the obliteration of some of the best portions of that measure. Nothing was more strongly urged, both by the Central Chamber and by the critics of last year's Bill generally, than that the union areas should be adopted instead of the petty sessional divisions for electoral purposes. That

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suggestion has not been adopted, the excuse being that unions frequently overlap county boundaries. Now it was pointed out last year that this objection might be obviated by directing that the guardians of the portions of unions which overlap county boundaries should vote for the counties in which their districts were situated until the union areas should have been rectified. Mr. Sclater-Booth has not taken this way out of the difficulty, but proposes that the county justices should divide the counties into wards, choosing any areas which they may think suitable for electoral purposes.

As for the powers and duties of the County Boards under the new Bill, it appears that they will be both few and simple. Their attention will be directed to local areas, but, apparently, only with the object of allowing them to make representations to Parliament as to rectification, without giving them any power of effecting improvement in this respect themselves. They are to have the administration of the Highway Act passed last year, and the management of bridges. They are also to have the power of "reviewing" the workhouse accommodation of each county and of providing for the reception in the workhouses of imbecile and idiot paupers, whether adults or children; but they are not to have any direct power over lunatic asylums, as they would have had under last year's Bill; nor will they have amongst their functions that of attending to the conservancy of rivers, as under the previous Bill, because a special measure for dealing with rivers has been introduced in the House of Lords. Lastly, the County Boards will levy the county rates, out of which will be paid the cost of enlarging lunatic asylums, but not that of maintaining the lunatics, which will fall on the workhouse authorities, and not on the county.

It is obvious that this Bill has been mainly framed to satisfy the views of the county justices, and not to fulfil the desires of the ratepayers for representative county government. The chief opposition to the measure will be based, as it was to that of last year, upon the proposed mode of electing the members of the Boards. It is even more manifest than it was last year that nothing but direct representation will be accepted as a final reform of county government, and it is astonishing that the Government should think it worth while to disturb the present system for the sake of providing a new authority with so few functions and so little power as will be granted to it under the present Bill. As Lord E. Fitzmaurice remarked, the Bill "sets up a County Board with duties so absurdly small" that he believes it "will meet with one loud peal of laughter, which is all that it deserves." Mr. Whitbread declared that it would not settle any one of the demands which local government reformers were making. Mr. Hibbert thinks it will be better to wait five or six years and let the question mature, rather than deal with it as now proposed; adding that if it is worth while to make any change it is worth while to make a more extensive one than is proposed by this Bill. Mr. Cowen summed up the prevailing chorus of disapprobation with which Mr. Sclater-Booth's proposals were received, by

saying:—"This Bill would settle nothing at all, and any attempt to peddle with the question, instead of mending matters would only make matters worse." The measure was defended only by three representatives of the magisterial party, and although Mr. Read and Mr. Pell were pointedly invited to declare their opinion upon the measure, they maintained silence, which Mr. Goschen remarked upon as an "ominous fact." It is certain, then, that the new County Government Bill will be strongly and persistently opposed, and we hope that the opposition will be strong enough to prevent the passing of a measure which will utterly fail to give satisfaction to the country.

## AGRICULTURAL EDUCATION.

Few questions connected with agriculture have made more rapid progress during the last three years than that of Agricultural Education. Farmers have seen science brought to bear upon their every day work, and it was clearly to the advantage of their sons to be educated a step or two beyond ordinary school work, so as to help them when they afterwards went into business as farmers. The action taken by the Government in 1876 has rendered this additional instruction easy of command, even by our smaller farmers, and of course those more richly endowed with this world's goods can secure the same. The establishment of science classes appears from the latest official reports (which only come up to December, 1877) to have progressed very rapidly, for there were then about 100 classes established for giving instruction in the principles of agriculture, and about 1,600 pupils were being so instructed. Since that time very great energy has been shown in promoting the work, and the numbers of the classes and the pupils are now largely increased.

A very general feeling exists amongst farmers in favour of this instruction becoming more general. The action taken by the Central Chamber of Agriculture in appointing an Education Committee, coupled with the fact that, acting upon the recommendation of the Committee, the Central Chamber has advised the several local Chambers to follow its example, so that each of them may have an Education Committee, may be taken as fair proof that the work is moving forward rapidly. We understand that arrangements are progressing throughout England for making use of another portion of the Government scheme, by the establishment of scholarships of £50 a year, for enabling the best pupils in the several classes to have superior instruction in agricultural science. This system, therefore, enables a small farmer whose own means do not allow him to send his son to a college, to obtain for him all the advantages of an education of a satisfactory character.

The time has now come when the sons of farmers must have an institute in which the highest class of instruction shall be within their reach. It has been hoped by many of the promoters of agricultural education that the institute which was encouraged with so much interest by the late Prince Consort, for the benefit of the tenant farmers of this country, would spread its wings so

as to become a National University for Agriculture. That hope, we need scarcely say, has not been realized in the Royal Agricultural College. Instead of its usefulness being extended, recent events show that it is becoming more and more contracted in its sphere of operations. Already the "Royal" has been struck from its banner, and judging from present appearances the style "College" will in all probability soon be altered to "School," and the whole will be under the care of ushers directed by a schoolmaster. We regret this all the more because we have watched its progress from its first establishment with deep interest, and we have seen evidences of good work. Properly handled, the Royal Agricultural College might not only have done far more than it is now doing for the sons of the aristocracy, and continued to have met the requirements of this class, but also have come to the front, and aided agricultural education amongst the tenantry of the kingdom. That duty, however, must now devolve upon another institution, which will shortly enter upon its work with many distinct advantages, inasmuch as a large number of the Professors who have been so injudiciously treated by the authorities at Cirencester will be able to bring their matured experience into a more congenial association. The demand for superior instruction in agricultural science is rapidly increasing, and that demand must be supplied. If the present institution renders itself incompetent for its duties, some younger offshoot must do the work, and we can only hope that its progress will be characterised by a rapid and prosperous growth.

### THE AMERICAN WHEAT SUPPLY.

A correspondent of the *Chicago Tribune* writes under date March 2nd:—

The total exports of wheat and wheat flour from all the ports of the United States in the year to June 30, 1877, as reported by the United States Bureau of Statistics, were equal to 57,043,936 bushels of wheat, and for the year to June 30, 1878, they are given by the same authority as equal to 92,139,936 bushels of wheat.

It is well known that the stock of wheat in the United States on July 1, 1878, was unusually low, and it is therefore fair to presume that the export of, say, 92,000,000 bushels up to that time was the utmost we could spare—above our own requirements for consumption and seed—out of the crop of 1877.

Now, without entering into the discussion as to what was the total of either of the last two crops, we may assume that the crop of 1878 was, say, 60,000,000 bushels greater than that of 1877. But as it is well known that it requires more of the spring wheat of 1878 to make a barrel of flour than it did of the spring wheat of 1877, and as it is also tolerably certain that our requirements for consumption and seed will be a little larger in 1878-9 than they were in 1877-8, the increase of 60,000,000 bushels in the last crop will not add more than, say, 55,000,000 bushels to our surplus available for foreign export. This increase, added to the 92,000,000 reported in the previous year, would indicate our total surplus available for foreign export in the year to June 30, 1879, at 147,000,000 bushels. Let me see how much of this has already gone.

The total exports of wheat and flour (the latter at five bushels to the barrel) from all United States ports from July 1, 1878, to Jan. 1, 1879, were just about 93,500,000 bushels, as follows:—

Atlantic ports ... ..	76,962,296
Pacific ports ... ..	14,606,893
New Orleans, say ... ..	2,000,000
<b>Total ... ..</b>	<b>93,576,189</b>

From Jan. 1 to Feb. 25, the total exports from all United States ports aggregated about 16,000,000 bushels, as follows: From all Pacific ports and from New Orleans, say ... .. 3,000,000  
From U.S. Atlantic ports, each week, as follows:

Jan. 8... ..	1,350,000
Jan. 15... ..	1,290,000
Jan. 22... ..	1,361,000
Jan. 29... ..	1,257,811
Feb. 3... ..	2,123,226
Feb. 10... ..	2,102,618
Feb. 17... ..	1,907,688
Feb. 25... ..	1,803,410
	<b>13,196,359</b>

Total from Jan. 1 to Feb. 25 16,196,359  
Previously since July, 1878 ... .. 93,576,189

Total from July 1 to Feb. 25 109,773,547

Deducting the 109,773,547 from the presumed surplus of 147,000,000 bushels available for foreign export out of the crop of 1878, it would leave 37,226,453 available for export yet, before another crop is harvested. But the presumption of so large a surplus for foreign export yet is based upon two propositions: (1) That the increase in the crop of 1878 was as large as 60,000,000 bushels over that of 1877; (2) that the visible supply shall be reduced by July 1, 1879, to as low a point as it was on July 1, 1878, viz., 4,943,632 bushels. If the exports should continue at the present rate for three months, our immense surplus from the crop of 1878 would be practically gone, and the stock of wheat in the United States would be reduced to about its usual average at the end of the crop year. It seems probable that the low price will induce the holding back of considerable wheat in the country, and that after the spring planting begins the receipt of wheat from the country will be lighter than usual. This seems the more likely to be the case when the visible supply begins to diminish, and it begins to be apparent that the surplus from the crop of 1878 is almost gone. Hitherto neither dealers nor speculators have been able to "see the end" of the supply, but when they do it is not improbable that it will result in greater firmness on the part of holders.

Much depends on the character of the weather during the next six weeks. If the spring should be late or wet, farmers would be less willing to part with whatever they may have on hand; and unless the prospect for the next crop should be fair for a yield equal to last year, the surplus would probably not be sold out as clean as it was in July, 1878.

Just at present the prospect is that the foreign demand, which has already exceeded the most sanguine expectations, will continue.

The latest advices from France (to about the 10th ult.) say that the deficiency in the French crop was greater than had been estimated, and that France will continue to be an importer of foreign wheat. The quality of the French wheat is also represented as so poor that it requires 20 per cent. more wheat of the crop of 1878 to make the same weight of flour than it did of the wheat of 1877. Thus the deficiency in the French crop was in reality greater than it appeared in bushels.

In view of the great apparent supply of wheat in America, Great Britain has not been in any hurry to buy, and from Sept. 1, 1878, to Jan. 1, 1879, her total net imports of wheat (over exports) were nearly 2,500,000 bushels less than for the same period of 1877. The only countries of Europe that have any surplus of wheat for export are Russia, Hungary, and Roumania; all the rest had deficient crops in 1878, and have been steady importers up to the present time. The great bulk of the immense quantity of wheat exported from the United States in the last eight months has gone to supply deficiencies in markets which had hitherto taken little if any American wheat.

At the sale of Mr. Longmore's selection of sixteen animals, pure-bred Shorthorns, the highest price made was for a yearling bull descended from Constantine, namely, 38 guineas. Eight bulls averaged £30 6s. 4d., and eight heifers averaged £24 13s.; the sixteen animals making an average of £27 18s.

## FORMATION OF A TENANT FARMERS' ASSOCIATION.

### MEETING AT WARWICK.

A meeting was held at the Corn Exchange, Warwick, on March 8th, for the purpose of forming a Tenant Farmers' Association. Several hundred agriculturists were present, all parts of the county being well represented, and the proceedings being characterised by a degree of enthusiasm which is quite unique in farmers' meetings in the district.

On the proposition of Mr. E. SCRIVEN, of Wormleighton, seconded by Mr. WAKEFIELD, of Fletchampton Hall, Mr. Stilgoe, of Clopton, was voted to the chair.

The CHAIRMAN, who said he had been a tenant farmer ever since he was of age, expressed the pleasure it afforded him to preside on the occasion. They had been invited to attend that day for the purpose of changing the nasty, ugly, rusty, and unfavourable name of grumbler for that of struggling to help themselves. This association meant unity, and by joining it tenant farmers would be able to make their voices heard throughout the land. The association would, he hoped, be sufficiently elastic to embrace any tenant farmer, not only in Warwickshire, but also throughout England (Applause). Answering the query—Whence the depression in agriculture? he argued that it was attributable to rents being too high, the rates pressing too heavily on farmers, and one-sided free trade. As this was a preliminary meeting he would not detain those present further than by reading the proposed rules, a copy of which is subjoined:—

"1.—That this association shall be styled the Tenant Farmers' Association, and its objects shall be to take into consideration all questions, whether political or otherwise, affecting the interests of the tenant farmers, and to make known to members of Parliament or others what, in the opinion of the association, is most desirable for the advancement of their interests.

"2.—The association shall consist of members, whose numbers shall not be limited, who shall annually elect a chairman and vice-chairman out of their number, and appoint a secretary, who may be a member or not, and whose appointment may be made for any period agreed upon.

"3.—Members shall consist solely of persons answerable to either of the undermentioned definitions: Tenant farmers in the occupation of land for which a bona fide rent is paid, or who have lately been tenant farmers, but are at the time of their entrance out of business, or engaged in some other business, or who are now or have been lately engaged in the management of a farm for which a bona fide rent is now or has lately been paid; or sons of bona fide farmers engaged in the occupation of land, and not in business on their own account.

"4.—All eligible persons wishing to join the association may do so on application at any of the preliminary meetings, or by application to the secretary or any member of the association, until the association shall have commenced work—that is, when the first subject shall have been discussed; after which time it shall be necessary that members be proposed and seconded before admission.

"5.—A committee consisting of members shall be formed at one of the preliminary meetings, who shall advise on any alteration, addition to, or amendment of the rules if deemed desirable, and advise on any other matter of business connected with the association, and submit the results of their deliberations for the approval of the members at their next meeting.

"6.—Meetings shall be held in the town of Warwick, after the preliminary meeting, not oftener than once a month.

"7.—A yearly subscription of five shillings shall be paid by every member, to commence on entering the association, which shall contribute to the formation of a fund for defraying the expenses of the association."

Mr. E. SCRIVEN, of Wormleighton, in proposing the adoption of these rules, remarked that it might be said that, as Agricultural Societies and Chambers of Agriculture existed, there was no necessity for a Tenant Farmers' Association. Agricultural Societies were intended to develop the resources of the land, to foster the improvement of stock, and encourage the labourer in thrift and good workmanship. Chambers of Agriculture were started some years ago, in the hope that they would accomplish some of the objects for which this

association had been promoted, but from some cause or other the Chambers had not succeeded. He believed their failure was attributable to the want of numbers, and he could not see why greater support had not been given to those organisations. He concluded by expressing his best wishes for the success of the proposed association.

Mr. WAKEFIELD seconded the proposition, and complained that Chambers of Agriculture had not proved so beneficial to agriculture as the farmers had been led to expect. Despite everything, the tenant farmers had had increased burdens cast upon them, and they were not represented by members of their class in the House of Commons.

The CHAIRMAN inquired if any other gentleman wished to address the meeting.

Mr. CLARKE (Churchover, near Rugby) mounted the rostrum, and, in the course of a speech delivered with great energy, said that with land to be bought in America and Canada at considerably less per acre than the annual rent paid in England, and the produce of the former within a fortnight of English markets, by cheap water carriage, the rent of agricultural land in this country must come down with a vengeance, and tenants would be brought to ruin wholesale while prices and profits of land in England and America were balancing themselves; and England would be brought to the verge of bankruptcy by the breaking of her back-bone—the farmers of England. Farmers have such a reputation for grumbling that now many of them would be devoured by the wolf "ruin" before landlords would believe in the extremity of their distress. Prices have been as low before, but farmers had not then to bear the burdeas which have been heaped upon them during the years of prosperity following the adoption of Free Trade; such as increased rents, expenses of highways and turnpikes, additional charges for educational, sanitary, and Poor-law administration, and higher rates of labour, all of which charges must fall upon landlords when tenants have been ruined. Only a few of the more generous landlords have made a return of 10 per cent. on rents; but the crisis demanded a reduction of 40 or 50 per cent. on rents. Americans having proved that if England will not grow food for her people they can and will do so, the retribution of game preservers was at hand, and their turn would come first. Other nations could, by the imposition of protective duties on many of our manufactures, stimulate such productions in their own countries, and until England largely increased the production of the first necessities of life she could not do without the contributions from other lands; if she put a protective duty on these imports she would have to pay the whole of it. Our altered relations with other countries as to food supplies would take political power out of the hands of game preservers. When farmers held land under six months' notice to quit it kept them pretty close to their landlords' heels in politics, and checked the productive power of the land. Some farmers would not spend much money in improvements that would not come back in the first crop, because it put them more completely under the power of their landlords. He was far from saying that all landlords were guilty of these legalised robberies.

The CHAIRMAN strongly protested against this expression.

Mr. CLARKE, after some interruption, made some further remarks on the insecurity of the capital invested by tenants in the land. Ridiculing the objection that farmers dressed too well, he said that if some of them had spent only their profits on wearing apparel they would probably have shocked landlords' sensibilities by not being dressed at all. (Laughter). The abolition of the game laws would at once ease the rates; rents must be materially reduced; game and rabbits must not be allowed to adulterate land let for agricultural purposes, and cultivators must not be at the mercy of any unscrupulous landlord who might choose to rob them—(interruption, and cries of "Go on"). Unless something was done quickly a large proportion of the cultivators of the soil would be ruined, and rents would fall to a ruinous extent, as few men would engage in a business which had brought so many to ruin. To impose a tax on the necessities of life and raise the cost of living here would probably drive many of our best workmen, rural and urban, to the cheap food across the Atlantic, where the process might be encouraged by putting on an export duty there, that people might go there and eat corn and meat, instead of America having to send them here to be consumed. This might be...

production here, but it would not increase demand here or elsewhere, the only result being to tax the poor instead of the rich. The man who made but one blade of grass or corn grow where two or three might grow was a national malefactor, and should be restrained from wasting the people's food by adulterating agricultural land with game and rabbits, and should be compelled to give a tenant right which would encourage the utmost production, and this could be done without the interference with the freedom of contract then arose from telling the milk-seller he should not put water in his milk (Laughter and applause). When England could produce different food and clothing for her people the foreigner might send hither as much as he liked; and perhaps the more the better. Abundant produce formed the wealth of a country, and for us to raise the cost of living would be to handicap our manufacturers. Cheap food is a necessity, and if farmers are to be benefited by anything besides reductions of rent and wages, it must be by increased production, and the statesman who removed obstructions from the full development of the capabilities of the land would deserve the people's gratitude (Cheers). The rent value of our agricultural land was the rent value of agricultural land of equal productiveness in America, plus the cost of transit of the productions to our markets, and anything paid beyond this enriched the landlords at the expense of the tenants. He besought tenants to unite, and save their country from ruin and themselves from the avarice and caprice of game preserving, tenant-right withholding landlords, and thus secure the reduction of rent to an extent at which they could get a living.

The CHAIRMAN, who had objected to several of the expressions used by Mr. Clarke, said he had not expected such a speech from that gentleman.

Mr. LANE (Broom Court), who said he had been unexpectedly called upon to speak, addressed himself to the remedies which might be suggested for the amelioration of the present depression in agriculture—a subject with which, he confessed, he could not adequately deal on an occasion like that. All of them felt strongly on this matter, but he hoped it would be understood once and for all that there should be no antagonism between the tenant-farmer and the landlord (Loud cheers). He maintained that there was no other body of men in England more loyal to the Queen, more loyal to the aristocracy, or—he must say with due deference to the sentiments of others—more loyal to Church and State than were tenant farmers. The causes of the present distress were three-fold—those relating to the land, labour, and laws. All of them were interested in the land. Tenants naturally looked to their landlords for liberal treatment in times like the present, although they could not expect the owners of land paying them only two per cent. to adopt the previous speaker's suggestion, and make them a reduction of fifty per cent. Holding land, under such circumstances, would not be very enviable. He trusted that landlords would meet tenants in a fair spirit, which was all that was desired. Coming to the labour question, Mr. Lane said he did not see how a man could keep a wife and family with a less rate of wages than the present. Under the existing circumstances of farming it was impossible for farmers to keep up the present rate of wages, however much they might wish to do so. They wanted a better quality of labour and full time (Applause). Turning to the legislation affecting agriculture, the speaker complained that tenant farmers, who were not directly represented, had very little to do with the enactments affecting their welfare. If there had been in the House of Commons thirty practical agriculturists, thoroughly acquainted with the details of their business, the occupiers of land would not have had thrust upon them additional burdens on account of highways, schoolboards, sanitary, lunatic asylums, and other measures which operated unfairly upon the class to which those present belonged. The best way to meet the difficulty was for each county to return to Parliament one of its most intelligent tenant farmers. Was there any reason why representatives of that class should not be found in the House in which sat Mr. Burt, Mr. Macdonald, and Dr. Kenealy. Of the eleven members returned by Warwickshire one might be a tenant farmer. If there were thirty of that class among the 600 members, it would not upset the Constitution, but rather balance it, and the interests of farmers would not be overlooked when laws were about to be made

which contributed to the ruin of their class. The interests of landlords and tenants were identical; they were said to be sailing in the same boat, but if the crews were upset what would the captains do? Tenants were being deprived of their capital. Would landlords find the money to till the land themselves? Would it not be better for owners of the soil to encourage tenants while they have any? He (Mr. Lane) paid double the rent he used to pay for his present holding, and the rent was also doubled in the case of his predecessor. The farm, which was now advertised to be let, was described as being in the highest state of cultivation, and although he had offered as yet the higher rental for it, he was turned out because he would not have the proposed lease hung round his neck under present circumstances. If tenant farmers were united, and used fairly and constitutionally the influence which they possessed, they would carry their point; but there must be no jealousy, and he was sure hon. gentlemen would not be ashamed to sit in the House of Commons with any first-rate practical agriculturist whom occupiers might select.

Mr. BERRY CONGREVE complained that the meeting was not of a practical character, and that it had not so far done any business. He objected to the proposal to restrict membership to tenant farmers, and suggested that all who farmed land should be eligible. All farmers had suffered fearfully from Mr. Arch having set the labourers against their employers. He had lost much money on that account. The farmers were suffering not so much from the increased price of labour as from the fact that the vagabonds would not work. They could afford to pay if the men would work, but they would not work. If the present movement was to do good, it must have the landlords with it. Where landlords acted unfairly it was from want of knowledge, or through leaving their affairs in the hands of agents, who misled the tenants about anyhow. He passed on to eulogise the organisation of Chambers of Agriculture, and urged that their want of success arose from farmers not joining them as they ought to have done. With regard to the question of representation, he charged upon the tenant farmers the ills of which they complained in that respect, and urged that the present Government, which was a farmers' Ministry, had given agriculturists a smack in the mouth which others durst not offer. Unless the new association was better supported than the Chamber of Agriculture had been it would not go far.

Mr. TOMES, of Stratford-upon-Avon, urged the necessity of every county in England having one tenant farmer representative in the House of Commons.

Mr. STOKES remarked that the association should not be confined to Warwickshire, but extended to all England.

The rules were adopted, and a vote of thanks to Mr. Stilgoe for presiding closed the proceedings.

A Tenant Farmers' Association has recently been formed for Solihull and district. Several meetings have already been held, and a code of rules adopted. The rules provide that the association shall be called "The Solihull and District Tenant Farmers' Association;" that the object shall be "to better the situation of tenant farmers generally in any manner the members may determine either politically or otherwise." Every member is to be a *bona fide* tenant farmer. The members are to be balloted for, and the management of the association is to be vested in the chairman and committee of the members. Mr. King, auctioneer, Union Passage, Birmingham, is the secretary *pro tem*. At a recent meeting a paper was read by one of the members on "The Relative Interests of Landlord and Tenant." The speaker said that on the questions of rent, recompense of unexhausted improvements, or the game laws, the interests of landlord and tenant were as wide apart as the poles. With reference to the question of rent, he pointed out that in some instances rent had risen 100 and 125 per cent. in forty years, although the land was applied to the same purpose as previously; and he found that the price of wheat between the years 1830 and 1838 was 55s. 2d., whereas, that of the last four months was 40s., or the lowest average for more than twenty years. At the same time the price of labour was at least 60 per cent. greater now than then. He remarked that owing to the imports of wheat and other grain from foreign countries, grain-growing was not likely to pay now in this country; in fact, every article of produce which the farmer had to sell was cheaper now than had been known for a long time. Even the last resource of.

the British farmer was likely to fail to him—viz., beef and mutton. They read that in the week before he was speaking 6,294 quarters of beef, 1,803 sheep, 369 pigs, and 922 beasts came from America; and a statement had appeared to the effect that in Ontario they had 25,000 fat cattle ready for export to this country. Under such circumstances as these it could not be wondered that farmers, finding their capital diminishing and rents being paid out of pocket, were beginning to find that their former apathy would no longer serve them. The payment for any improvements the tenant might effect and leave behind him for the benefit of the landlord had been agitated for years, and the justness of the principle was conceded on all hands, but it had been evaded, and the natural consequence was that tenant farmers were not anxious under present circumstances to improve their holdings. The farmers, at the last general election, voted on the Conservative side, with the hope of getting a measure passed. The Agricultural Holdings Act of 1875 was passed, but a loophole was left through which the landlords could escape present or future liability. The result had been that the landlords, including the men who made the law, had almost to a man availed themselves of the provision which enabled them to contract themselves out of the Act. After all the agitation they found themselves where they started, without protection for the capital an occupier might put in or upon the land he occupied other than documents called agreements, to which the speaker attached but little value, and characterised them as often being one-sided. He also condemned the present state of the Game laws, and said that if farmers submitted longer to the present state of things they richly deserved the joke they were,—*Banbury Guardian*.

### PLEURO-PNEUMONIA IN AMERICA.

Professor Salmon has published a very sensible letter in the *Albany Country Gentleman*, of which the following is the principal portion:

If pleuro-pneumonia exists in this country, there is nothing to be made by attempting to conceal it; we, as a people, want to know where it is, and the danger to be apprehended from it; the States into which it has not been introduced, want to know how close it is and how they are to keep free from it; those who have built up a great trade in shipping live cattle, whether they want to know or not, certainly should know if there is danger of exporting this disease, and thus putting an end to the trade at once, as may have been done already; and Great Britain, too, has a perfect right to the fullest information on the subject.

There can be no doubt that a disease considered by the more intelligent to be contagious pleuro-pneumonia has existed for many years on Long Island and in various parts of New Jersey and Pennsylvania. In 1869, Prof. Gamgee made careful investigations into the nature of this disease, and recognised it as contagious pleuro-pneumonia; and in his report to the Commissioner of Agriculture, he gives conclusive evidence that it had then extended to Maryland, Delaware, District of Columbia, and Virginia. In 1872, 1873, and 1874, I saw the disease in Newark, N.J., and vicinity; I made careful investigations, and watched the disease through its different periods, and I know that it was *contagious* pleuro-pneumonia. I know, farther, that it was not confined to the city, but created sad havoc in the surrounding dairy districts from three to ten miles distant. The disease has been seen and fully recognised since in various parts of New Jersey and Pennsylvania, by Doctors Holcombe and Michener, and, I think, also by Professor Law. Professor Law, at least, has positively stated that more than one herd of thoroughbred cattle was infected in 1877, and those who know the character of the man need not be told that he would not make such a statement without the facts to back it up. The disease which Gamgee saw in Maryland and District of Columbia is well known to be there yet; cattle have been dying from it the present winter, and, whether this outbreak is of a mild character as claimed or not, there is no doubt in the minds of those who understand the diseases of cattle that it is the same insidious and fatal disease that is known by the same name in Europe.

If the disease remained in Long Island, New Jersey, and Pennsylvania from twenty to thirty years, as has been fully shown by Gamgee, where is there a shadow of reason for believing that it is not there yet, especially when local veteri-

narians are continually mentioning it? (See *American Veterinary Review* for May, 1878.) Is it a disease to die out of itself? And has anything been done with a view to its extermination? It is claimed that the disease exists only in a few Middle States; I ask, in all candour, how this is known. Michener in First Annual Report of the Pennsylvania Board of Agriculture, (p. 148) tells how it was carried to Ohio and Michigan in 1859; was it ever stamped out in those States? Professor Law thinks the extreme cold of our more northern States may destroy the germs, but this is only guess-work where we ought to have certainty. Add to this the case of its supposed introduction into Clinton, N.J., by a cow brought from Ohio little more than a year ago, and there are tangible grounds for suspicion.

But leaving this entirely out of consideration, is there not grave danger from the disease where it is known to exist, and where it certainly survives the winters? Gamgee found that it had been introduced into Maryland and Delaware by cattle bought in the Philadelphia market; he found it a common thing for cattle affected with the disease to be shipped to market. In this way the cattle *must* be infected. Now consider that the Baltimore and Ohio, the Pennsylvania and the Erie railroads run through localities where the disease exists; that the cattle cars on these roads must find their way to almost every part of the country, and probably be used for transporting cattle on their way to Europe; that some of these cars must of necessity be infected by shipping diseased cattle, thus becoming bearers of the contagion, and it must be admitted that the danger is not one to be trifled with—not one to be dismissed by a declaration that there is no evidence of its existence.

When I have called attention to this matter from time to time, I have not exaggerated the danger, I have never made the case as strong as the facts would justify; so far from wishing to interrupt the cattle trade, I have tried to make our people see the one great danger that must, sooner or later, inevitably destroy it. Although you consider the evidence of the existence of the disease as the merest hearsay, it is difficult to see what better evidence can be expected, while our general and State governments are so unwilling to have official investigations.

Finally, let us consider the question of responsibility. After this dreadful disease has been allowed to remain on our soil for thirty-six years; after a careful and detailed report of its nature, and the extent of territory it has invaded has been neglected by the government, the press, and our stock raisers, for ten years; after veterinarians have pointed out the danger from it again and again, who is responsible that the danger continues unabated? If our trade is destroyed by exportation of the disease, should those who have pointed out the danger be held to account and blamed for it? What, indeed, are the duties of the veterinary profession in regard to contagious diseases, if not to point out their character, prevalence and the danger to be apprehended from them?

England wants our cheap beef, and will not shut it out unless obliged to do so by our own stupidity and carelessness; but she has learned a lesson in regard to pleuro-pneumonia which it seems nothing but the same bitter experience will make us understand. It is the duty of our government to discover to what extent the disease exists here; it is an equal duty to enforce rigid measures to prevent its exportation. It will not take many ship loads of diseased cattle to destroy irremediably the live cattle trade; we are still able to prevent such a catastrophe; but failing now to take proper precautionary measures, we do not deserve the trade.

It is difficult to see how any one interested in the exportation can think it a better policy to keep silent in regard to this danger, than to demand active steps to remove it; the expense of such measures would be a mere bagatelle, and they are needed not less for our own protection than for that of England; while the mere fact that we had taken such steps would insure the continuance of the trade. A refusal to do a plain duty is as much a ground of suspicion with nations as with individuals.

An outbreak of typhoid fever has occurred at Orenhope, near Keighley, among a herd of 39 swine that were purchased a fortnight since at the Leeds market, and 14 animals have had to be slaughtered.

## ONTARIO AND EMIGRATION.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR.—Mr. P. Byrne, emigration agent for Ontario, troubles himself to write to you in correction of certain "mis-statements" of mine. This was recalled to my mind when I read Mr. Byrne's letter. He says the Ontario Government did not make an offer of 5000 acres of land to the Kentish labourers. As I am positive the Dominion Government made no such offer, if the Ontario Government did not, who did? The London correspondents of the Toronto papers distinctly affirmed that Mr. Simmonds had accepted an offer from the "Canadian Government;" and the same was intimated by cable. How is it the Ontario officials have left it uncontradicted till the scheme has failed. It would have been more ingenious in Mr. Byrne—who evidently knows all about the business—to have let us know who made the delusive offer in question. He is, however, discreet in not doing so. For since it was not either of the "Canadian Governments" it must have been one of the private speculative associations, which makes the thing more objectionable. In that case there would have been no guarantee for the well-being of the poor deluded labourers and no official responsibility, and those to whom the offer was made are more than before shown to have been sought for to be hewers and drawers on behalf of interested schemers who make their pile by the labour, at their own terms, of working machines whom they can allure hither by specious misrepresentations, and such half-truths as are contained in Mr. Byrne's *ex parte* and delusive paper on Ontario in a recent number of the *London Globe*. If Mr. Byrne will get that, or any other English paper of standing, to throw open its columns I shall be ready to join in controversy with the "Agent for Ontario," who, in the paper referred to, has shown himself, like Mr. Armand, either lamentably ignorant of the Province he professes to describe or otherwise a very unsafe guide to intending emigrants.

Mr. Byrne says the demand for agricultural labourers has ceased, and that the Ontario Government has discontinued effort and outlay in that direction. This cruelly demolishes a standing fiction which the *Toronto Globe*, and other emigration organs, give currency to about once a week. Only a few days ago the *Globe* pretended to challenge anybody to show when "there was ever a sufficiency of agricultural labourers in Ontario," and explicitly stated that that and the female domestic class now alone received encouragement from the Ontario Government. One of these witnesses must be untrue.

When a writer makes a general statement such as that in which I said "The only prosperous farmers are the children and grand-children of settlers of fifty years ago," he used a well-recognised mode of expression such as that of Archdeacon Fisher, when he says, "No man not educated to a calling from early youth can fully and justly enter into it." We know that not a few of the most successful editors, farmers, business men, and politicians, have achieved eminence in their line without early training. Yet none the less, *as a rule*, does the Archdeacon's remark hold good. Similarly, when I assert that the farmers in Ontario who can fairly be called prosperous are the descendants of old settlers, I am not to be supposed to say there may not be scattered up and down settlers outside this category who have proved successful. But I repeat that, as a rule, farmers in Canada are a struggling and unsettled body. I said the other day that two-thirds of the freeholds in Ontario are mortgaged, but from information gathered since I would now say that there is scarcely any piece of real estate, town or country, absolutely unencumbered. A community of small struggling freeholds is, as is shown in the case of India, the paradise of the money lenders. In Ontario the loan mongers are lord of all, more and more palatial become their offices, marble pillars,

carved stone buildings, sumptuous fittings, &c. They borrow money at 4 per cent. in England, and lend it on to Mr. Byrne's "prosperous" farmers at rates I am afraid to speak of. The *Toronto Monetary Times* of Feb. 14 says that while all classes, even bankers, are suffering "the loan societies are said to be making all the money." It is the farmers who are the chief customers of these associations, and pretty heavily they are made to pay the piper. In England it is not usual, I believe, to associate crowds jostling each other at the doors of the money Shylocks, eager to borrow on any usurious terms, with the "prosperity" of the flock which give their backs to the shearers.

As for Lord Dufferin, I hope Mr. Byrne doesn't expect I am going to regard *au sérieux*—in an emigration aspect—the ornate and artistic speeches of our delightful and accomplished ex-governor. I am aware the shipping agents and Mr. Byrne's own fraternity have spread Lord Dufferin's witching amenities all over Britain, and that they look upon them as the best thing out in their peculiar vocation. But I am afraid people who may have been instigated by his lordship's addresses to try their fortunes here, will have found that the Arabian Nights entertainments are not safe pilotage for anybody bound on life's serious business. Even the Icelanders in Manitoba were glorified as in a flourishing condition by Earl Dufferin. Yet it is sober fact that discontent with their sterile location and hard surroundings is so rife among them that there is a probability they will ere long make a general exodus into the States. "The result of such a migration" is deprecated by the *Montreal Gazette*, "as likely to be disastrous to the character of the Canadian North-West, as a refuge for the unsettled millions of Europe." For that matter, if the Dominion can find a refuge for its own "unsettled" entities, I think it need not trouble itself about the European millions. It has enough of them always on hand to provoke its quest.

I am, Sir, &amp;c.,

YOUR CANADIAN CORRESPONDENT.

The Banffshire local authority has deliberated on the advisability of stamping out Pleuro-pneumonia in infected districts, and has agreed "not to slaughter in the meantime, but to endeavour to get the animals forward in condition for the markets as early as possible." These canny Scots may possibly save a groat and lose a pound by their experiment.

The second volume of the Galloway Herd Book has been published by the Galloway Cattle Society; it contains the register of 361 pure-bred cattle—namely, 239 cows and heifers, and 122 bulls.

**DEMAND FOR REDUCTION OF RENT.**—"G. R. H." (Bicester) writes to the *Echo*:—"The agriculturists in Buckinghamshire seem to be about to bring the present crisis, in so far as they are concerned, to a climax. The whole of the tenants on an estate in the parishes of Dinton and Haddenham have given a written notice to the effect that unless a considerable reduction of rent is made they must give up their holdings. There are already several farms in this country wanting tenants, and unless some considerable concessions are made, more still will be to let."

**DURING THEIR HONEYMOON** they had been sitting and sighing and talking poetry in the balcony for three hours, all of which time he had both her hands tightly clasped in his. Finally she broke forth, "Tommy, dearest, I want to ask you something." "Ask me a hundred—a thousand—a million things!" he exclaimed in reply. "Well Tommy, I have got an awful cold in my head," she exclaimed, "and if I draw one of my hands away to use my pocket handkerchief, would you think it unkind of me? Just once, Tommy, and then you may have my hand."

## VARIOUS NOTES.

At a sitting of the French Customs Commission M. Waddington expressed himself unfavourably to the renewal of the commercial treaties, but on the vote being taken 22 were found to be in favour of their maintenance, and only three on the other side. Since the interview which the Society of French Agriculturists had with the Commission, M. de Monicault, president of the agricultural section of the Society, has communicated to the Commission a note in which, after asking that agriculture should take an equitable part with other industries in the tariffs imposed, he draws attention to the advisability of establishing on a wider and more complete basis superior agricultural education and professional instruction. The provincial societies continue to express their views upon the customs question. Thus that of the Seine-et-Oise insists that agriculture should be enabled to meet on fair ground both other industries and foreign competition. The central society of the Yonne prays that in settling the dues and in renewing the treaties, agriculture may not, as in 1860, be sacrificed. Among minor societies, that of Bar-le-Duc follows in a like strain.

That agriculture does not invariably profit from the support accorded to it by the State is shown by the fatality which has just befallen the Society of Avallon (Yonne). Last autumn the prefect presided at the annual show, and made a speech rather political than agricultural. This speech the committee thought proper to exclude from their printed proceedings, as being utterly unconnected with their purpose. This action led to recriminations, which have resulted in the summary dissolution of the Society by the prefect, whose authority ought rather to have been exercised in preventing the speeches from taking a political turn.

Mr. W. J. Fowler reports a dubious prospect for a large wheat crop this year in Western New York.

As a suggestive commentary on the theory that cattle and sheep will get enough water from snow, the *Kentucky Live Stock Record* reports the loss of thousands of these animals this winter in that State and many more thousands on the plains of the West, from thirst and its inflammatory effects on stomach and brain.

Several farmers in the neighbourhood of Gwynedd, Penn., are reported by the *Ducks County Intelligencer* as having lost their potato crop last year by planting seed that never came up, on account, as was afterwards ascertained, of the tubers having been sprinkled with salt by a dealer or shipper to prevent their sprouting while in his hands.

The *New York Tribune* says:—"The quiet Mr. Brown, of a rural town in Connecticut, has suggested that if the main object of the agricultural fair is to draw a paying crowd, the Spanish bull-fight might prove even more effective than the trite and commonplace horse-trot; at any rate it would require less room, and the half-mile track is an expensive thing to keep in good repair."

The *New York Journal of Commerce* lately published some interesting statements going to show that the last year was marked by a very unusual movement in extending the area of cultivated land at the West and the number of persons engaged in agriculture. In the first place during the year ending June 30, 1878, the sales of government lands were 7,562,000 acres, against 3,338,000 in the previous year. Of this area 2,348,000 acres was in Minnesota. The sales of railroad lands are said to have been generally large. Dun, Barlow and Co.'s annual circular estimates the new lands settled in 1878 at 20,000,000 acres, and the occupants thereof at not less than 100,000 families, equal to half a million souls.

Our Canadian correspondent writes under date, March 5:—"The cattle jobbers and the forwarding companies are bringing pressure to bear on the Dominion Government in order to get the Canadian embargo on American beasts removed. A meeting of cattle exporters is expected to be held in Toronto in a few days. The stir and agitation on this point seem confined to the dealers and forwarders; no one else seems interested in it. In the newspapers the question is ignored, save by one or two Toronto and Montreal journals. The endeavours of the few interests affected to expose this country and Britain to the serious risk of an extended reign of pleuro, merely that their own pockets may not suffer, can hardly, I apprehend, find a favourable response from the Canadian Government. Mr. Pope, the new Minister of Agriculture and Emigration, has just submitted to Parliament a report of the proceedings relating to the cattle trade since January 1, 1879. I have seldom read a more curious document. In this report he says:—"Being made aware by a surmise of the *Live Stock Journal*, and other English agricultural papers, of the existence of pleuro-pneumonia in the United States, and especially in the neighbourhood of Washington, I immediately scoured the services of Professor McEachran to visit the seat of the contagion; and, on January 23, he made me aware of the prevalence of the disease in several States, which information has since been verified. I was deliberating with my colleagues on what was to be done in this alarming state of things, when, on January 28, I received the following cablegram from Mr. Dyke, an officer of the department at Liverpool: 'Steamer *Ontario* arriving with cattle from Buffalo and Canada, having incipient pleuro-pneumonia, ordered to be slaughtered on quay; probably necessary you guarantee no disease in Canada, and prohibit American cattle, you can then export from Halifax.' Mr. Pope says on receipt of this he immediately placed himself in communication with the Imperial authorities, causing at the same time an investigation to be made of the state of the health of Canadian cattle. Having been made thoroughly aware of its healthfulness, and of the measures determined on by the Imperial authorities, he reluctantly recommended that the importation of cattle from the States into Canada should be prohibited. The Privy Council accordingly passed the necessary order limiting the prohibition to three months, leaving the transit through the country unaffected. This latter however, on further intelligence from England, was also prohibited."

It is marvellous indeed, that the first gleam of knowledge that pleuro existed in the States should shine on the department here through the medium of the English papers. Singularly in contrast with this unique circumstance is the following extract from a report of the Canadian Department of Agriculture in October 1878. At that time the passing of the Contagious Diseases Act in England required action from the Government of Canada to prevent Canadian cattle being subjected to the slaughtering clauses. The Department, therefore, in reply to, and in order to minister satisfaction to the Lords of the Imperial Privy Council, forwarded a copious despatch setting forth:

1. The laws regulating the importation of animals into Canada.

2. The methods adopted to prevent the spread of existing contagious disease.

3. A periodical report on the general sanitary condition of Canadian animals.

This was followed by a laudation of the watchfulness of the Department, and the stringency of the measures adopted by the Government to keep out disease.

With reference to the Protectionist movement in Canada, the *Toronto Globe* says:—"The Tories have a deep-laid plot afoot, by means of which they no doubt



hope to shut the mouths of the farmers, who, indeed, are getting much too restless to bode good to the Government. The Government have promised to the farmers real, tangible protection, such as the manufacturers are going to have. They now find that it is a matter of impossibility to give our farmers any protection, which, upon the slightest investigation, will not turn out to be either a rank humbug or else actually injurious to as many farmers as are benefited by it. That being the case, the Government is preparing to shirk all responsibility for the failure of farmers' protection by shifting on to the farmers the task of settling the details, so that, when the failure to protect becomes apparent, the Government can turn round and protest that their hands are clean, as usual.

Of the harvest and other agricultural affairs in New South Wales, the *Sydney Morning Herald* of January 25th reports as follows:—

"On the Northern coast agriculturists are hopeful. On the Clarence the new year opened most auspiciously on good crops and abundant grass, and so far as this year has gone the weather has been all that could be desired to ensure a golden harvest. In the West the harvest, now nearly over, is the finest ever known. The combined reapers and binders have done great service in the Bathurst district. Carcoar and Blayney will return a grand average, and Orange will not be much in the rear. A good downpour of rain would do great service in the Western country, and is anxiously expected. The dairy districts of Illawarra are looking well. The yield of wheat in Bombala is considered fair. In the South-west the samples of wheat offered to millers are of excellent quality. The farmers of Grenfell have lost cattle and horses from what is said to be a strange disease. Albury is still blooming, and Deniliquin and Wagga Wagga are in fair condition. The Sydney Meat Preserving Company, which is now in full operation, employing about eighty hands, promises to relieve the metropolitan live stock market to a considerable extent. A large export trade of preserved frozen meat is badly required to relieve the graziers of their surplus stock. Good beef has been selling at the metropolitan yards at from 15s. to 18s. per 100 lb. by the carcase, and mutton of prime quality has failed to command more than 14d. per lb."

The opening of the International Exhibition at Sydney has been fixed for September 1. The Commission have decided to carry on the work of constructing the building by night as well as by day by means of the electric light.

From Queensland we learn that a meeting of stock-owners has been held for the purpose of strengthening the hands of the Queensland Meat Preserving Company. Mr. A. H. Browne occupied the chair, and it was agreed that the site of the proposed works should be on tidal waters near Brisbane. £1,900 was subscribed in the room, and a very influential provisional committee was formed.

The harvest in Victoria is stated, on the whole, to have been an unfavourable one, chiefly through the prevalence of rust.

The reports from the rust-infected wheat districts of Victoria show the calamity to be very serious. The scourge is to be seen from Echuca along the dividing range right up to Albury, and it is estimated that one-fourth of the wheat-producing area of the colony is destroyed. Many of the sufferers will certainly not be able to pay their rent this year. The Minister of Lands has intimated that he will deal with each individual case on its own merits. The *Riverine Herald* says in reference to the rust which has destroyed the crops in the Echuca and adjoining districts: "In this part of the colony the

harvest of 1878-9 will long be remembered as the most disastrous that has been experienced since settlement commenced. Under such circumstances, therefore, Mr. Longmore is justified in relaxing the strict legal conditions of the licences, and not enforcing payment of the rent. Already a widespread disposition is manifest to dispose of selections by those who are in a position to do so, but the market value of land has very greatly declined, and those who are anxious to sell are out of all proportion to those who are willing to buy.

Our New Zealand Correspondent writes under date (Province of Auckland) Feb. 4th:—The leading characteristic of the weather during the past four weeks has been excessive drought, a feature eminently conducive to the security of the hay crop, and severance and ingathering of the cereals, but very trying indeed to all stock-masters on light soils and exposed situations, as the pasture on all such places is completely shrivelled up. The farmers in the interior, who have a considerable range of bush, are at present much the best off, as the stock can retire from the fierce heat of the sun, and always find a good deal of moderately succulent food amongst the dense undergrowth, bullocks laying on flesh in this way on the indigenous pastures, and milch cows sustaining a fair flow of milk under apparently the most adverse conditions. The cool winds that almost invariably blow from the sea render this climate very enjoyable, as it is only for a few hours in the middle of the day that the heat is at all oppressive, and however warm the day may be the afternoon and evening is cool and bracing, continuing so during the whole night. This climatic peculiarity is obviously due to the configuration of the Province, which gradually gets narrow north of Tauranga, in some places not more than a few miles from sea-board to sea-board, thus giving the sea breeze full play, and enabling it to neutralise the effect of the heat given out by the earth during the night, which otherwise might be close and stifling, if not thus carried off. This, coupled with the mildness of the average winter, makes Auckland the favourite province of the colony, and it is, in consequence, fast rising in importance, its trade, commerce, and agriculture having rapidly extended of late years, while the influx of population has at the same time been considerable. The harvest has just closed, and was altogether a short business, the weather having been so fine; and thrashing goes on as fast as the steam engines, available in each district, can get through it. All is done in the field, and at once, few men, if any, ever thinking of speculating for a higher price by holding. Wheat is the leading crop of the cereals, oats being nearly all cut green as in New South Wales and Victoria, and barley is not as yet extensively cultivated. On all volcanic soils, and on reclaimed swamps, wheat is a good crop and will come up to forty bushels the statute acre, the head and straw on such land being a wonderful sight, the latter standing up after the first round of the machine like a solid wall, six feet in height, not a straw being broken or twisted, the colour like gold, a sure sign of a sound and healthy crop. On light, thin, and scoria soil, however, the dry season and indifferent seed time has produced the usual effect, and most fields of wheat cut up rather patchy, sinking the produce to twenty bushels, which at 5s., about the average price this year, would leave a miserable margin, if any, but for the straw which is all sold off the farm and is thus a great assistance to the struggling farmer. Potatoes have been injured to some extent from the same causes, and although of superb quality, the flavour being something exquisite when grown without dung or other manure, as compared with those grown by heavy manurial dressings, the weight per acre is less than usual, and the price correspondingly high. Field potatoes began to be lifted for sale in moderate quan-



titles about Christmas, and the opening price £9 a ton, falling to £7, the present price as they became more plentiful. Although four and five tons to the acre is common enough, yet on superior soils, ten tons has been reached, as ascertained by actual measurement and weight, a crop which returns a very handsome sum to the fortunate holder of land which costs him nothing for manure; such a crop during the present year, however, is the exception and not the rule. Unless on very large holdings, the crop is mostly lifted by hand labour, the Maories being experts at this work, and so careful and patient in clearing them out of the ground, as to almost if not altogether clear their own wages by the extra quantity they obtain to the acre. They are paid one shilling per bag of 14 stones, and as many potatoes as they like to eat while employed; and during the time the work is going on the entire family live in the field, husband, wife, and children camping out in the most literal sense of the word under the open canopy of heaven, and each rolled in a blanket, with their feet in a circle round the mass of red-hot pebbles in which their supper was deliciously cooked, if such an expression is not too grandiloquent for a roasted potato; they sleep the sleep of the weary and hard-working. To those farmers whose land is suitable, and who have turned their attention principally to hay and potatoes, and there are a good many such, this will be a really good year, their produce already commanding a high price; and there is every prospect of hay rising to from £8 to £10 a ton during the winter and spring, and potatoes from £9 to £11, and probably more should an extra demand spring up in the islands or down south. The country is now so bare from the long-continued drought that no matter how favourable the weather for growth between this and winter, the heavy stocks invariably kept, and which cannot easily be lightened, will keep the grass from ever getting ahead, so that everything that can be used as fodder must be high. Flockmasters complain of this as an exceptionally bad year, wool, their principal dependence, having been low, realising only about 8d. a lb. in the grease, and lambs have been all but given away. Small farmers may succeed in getting from 12s. to 14s. for the greater portion of their lambs from the butcher, but when the number runs on to a few hundreds, to make no mention of thousands, from 4s. to 6s. is considered a fortunate price, and great numbers must be cleared off at merely nominal prices, from 1s. 9d. to 2s. 6d. being as much as they realise when forced on the market, the wool on their backs being actually worth all the money, and the animals improved by taking it off; but they must go to clear the pastures, and every one being over-stocked they must go at a sacrifice.

Excellent breeding ewes, of good bone, young and well bred, can be had from 10s. 6d. to 15s., and the finest fat widders about 18s., the butcher's price at present being but 2d. a lb. Prime beef from 27s. to 32s. per short cwt. of 100 lbs., and all store cattle very low. High-bred cattle have suffered a considerable decline in price during the past season, not only here, but in the sister colonies, and many important annual sales show a remarkable reduction on the prices of last year, one of the most important sales in Victoria realising only £5,500, as against £20,000, £27,000, and £30,000 during the past three years, a pair of heifers going for 650 guineas, whose half-sister made at last year's sale 1,660 guineas. Like everything else unsatisfactory in Victoria, this decline is attributed to the nipping frost of class legislation, but it looks more likely that high breeding has been overdone, and that the animals are, if parted with, forced to be let go at their actual value. At the same sale, for instance, splendidly bred yearling Herefords had to go at six and seven guineas each, actually less than butcher's price. Large numbers

of emigrants have arrived, and are still arriving from the English ports, the present season having been a most successful one in procuring the right kind of people from the country districts in England. The "Maraval" arrived about a fortnight ago, bringing about 350 passengers, all of which able to do anything were almost instantly engaged, the Government barracks, where they are kept free of cost and most respectably until engagements are found, having been cleared in less than three days. Coming from a country where there is such difficulty in procuring employment at present, at any price, it is astonishing how stiff working men can be in making their first engagements, often refusing really excellent wages and comfortable situations in the dread of selling themselves too cheap. Married couples for farms in the interior get £72 a year themselves and probably three or four children found in everything, young lads willing to learn and make themselves useful on a farm from 10s. to 12s. a week, and servant girls from 10s. to 15s. a week; all with bed and board, ordinary labourers from 5s. to 6s. a day, and railway men from 8s. to 9s. 6d. a day.

From the Straits Settlements we learn that several lots of Tanjong Pagar sold at auction recently at from 50 to 70 cents per square foot, equal to 20,000 dols. to 30,000 dols. per acre. This same land was bought a few years ago from the East India Company for one rupee 15 acres.

With regard to Perak, the suitability of its soil for planting enterprise seems to be exciting more and more attention every day. Five or six more planters from Ceylon are now in the state examining its soil. Johore also is following suit. The Maharajah has offered Mr. Buchan, private secretary of the Governor of Ceylon, and formerly a planter, £1,000 a year to become a sort of Minister of Lands for Johore, and he is expected here in the beginning of next year, accompanied by four or five more planters, to explore Johore.

A correspondent in Massachusetts, U.S., informs us that Hereford bulls are being extensively used on the native herds of the Western States. There are eight good herds in the State of Illinois, and several herds of from 20,000 to 60,000 head of cattle in Colorado and Wyoming that are being sired with Herefords. One breeder in Illinois states that he has sold over 250 Hereford bulls within the last five years, but they are very scarce, especially in the Eastern States. If it were not for the prohibition now existing there would be no difficulty in supplying American breeders with pure-bred Hereford bulls at very reasonable rates, and no breed is more likely to do well in America than the Herefords.

We have not heard anything of late as to the result of the Cattle Truck competition. It will be remembered that the inventors of four of the models were invited by the Judges' Committee to have actual trucks constructed, on the plan of the models, for practical trial, which was to take place in October last. Whether anything of the kind has been done we are not aware. From America, however, we learn that the "Macpherson Palace Cars," about which so much was written at the time, are by no means a success. A correspondent of the *Chicago Times* says that these "Palace Cars" have been lying around upon side-tracks at the Union stock-yards for years, until by disuse many of them have become, like the time-honoured oaken bucket, veritably 'moss-covered,' so few shippers were there who would load them, even when offered free of any extra expense. Quite recently, however, a large purchase of very choice cattle was made here for a firm doing an extensive export business, the consignment to be shipped by rail to Philadelphia, and then transferred to an ocean steamer. In a train load of them there were six of the

'Palace' cars, and they not only had to be unloaded with the rest, at the usual feeding points, but were the source of more trouble to the shipper in charge than all the others. The cattle were 'down' more or less during the entire journey, and upon arrival at the seaboard showed plainly by their bruised flesh, stiffened backs, and broken horns, that the ear is the reverse of a humane device for the transportation of live stock for either long or short distances." Practical opinion is against the probability of any great success in the way of feeding and watering cattle whilst in railway trucks; and rapid transit appears to be likely to afford the greatest relief to the sufferings of cattle during transit. Most of the cattle trucks now in use on our several lines of railway are capable of considerable improvement, which would not entail a great cost, and would add greatly to the comfort and safety of the animals. But the present difficulties in connection with supplying animals in trucks with food and water arise from the unwillingness of the animals to eat or drink during transit. And, at present, there appear to be no means of affording them relief except by taking them quickly to their journey's end; for to unload and re-truck cattle during transit involves a loss of time, and other difficulties incompatible with our traffic arrangements. We should be glad to see the great markets of this country supplied with fresh meat rather than live cattle, so that the greater part of the cattle traffic might be confined to the movement of stores. This would suit producers and consumers, but would not meet the approval of middle-men, who live by the handling of live cattle.

The *American Stockman*, whilst admitting that the Order in Council will tend to the shipment of dead meat rather than that of living cattle, comes to the conclusion that there is seemingly but little encouragement for American stock-breeders to finish the animals before putting them on the market; and that the "prices of fully ripened stock will not be likely to be at a much higher range than those for medium to fair cattle." If we may judge from the difference in value between first and second rate beef in this country, and by the difference in value between the first and second rate American meat which comes here, the *American Stockman* makes a great mistake—that is to say, if the animals referred to are intended for the British market. If it does not pay them to send the best it is not likely to pay them to send anything else. And, singularly enough, since writing this paragraph, a subsequent issue of the *American Stockman* contains the following statement: "The strength of the demand for stock cattle in this market (Chicago) for shipment to Pennsylvania, Virginia, and Ohio shows that farmers there intend to go largely into the work of fattening cattle this year. One most encouraging feature of the business is the determination to fatten the stock fully before putting it on the market. While fat may be by no means the most desirable object in preparing stock for market, it certainly seems to be the thing most necessary in securing a paying price for such stock as is raised by farmers generally throughout the West. The value of fat as an aid in disposing of cattle has been shown in a strong light in this market of late, by the sale of common native steers, of no particular breeding and no good styles, at the top of the market. They were fat, and that was all the excellence they possessed, yet the scarcity of well bred, shapely steers, with plenty of lean—not poor—meat where meat is most wanted, forced these common cattle to sell for prices well bred stock would have gone for a few weeks ago." Both these statements appeared in the leading columns of the journal referred to; and, to us, appear to be very contradictory.

*Berrows' Worcester Journal* says that typhoid fever, which recently proved fatal to a large number of pigs in the neighbourhood of Chicheley, near Newbury, has broken out among the swine on several farms in the Elsley district of the county. Mr. Church lost 51 pigs out of a head of 56; Mr. Cardwell, of Manor Farm, lost 55 out of 58; and Messrs. Wells, of Smith's Farm, 14.

The *Marlin Ball*, makes the following statement:—"There has been considerable sickness on our creek lately—mostly pneumonia." And when it is remembered that the contagious pleuro-pneumonia which is now admitted to exist in certain States has been declared over and over again to be simply pneumonia, we may be excused for attaching grave suspicion to the "pneumonia" of Texas. The cattle forming the cargo of the Ontario were said to have been purchased at Chicago, and, therefore, we are justified in assuming that contagious pleuro-pneumonia exists west of that market, although the *American Stockman* declares positively that "there has never yet appeared in the West a single case of this ailment."

The *New York Herald* gives a sensational account of the slaughtering of diseased cattle now going on in the cow-sheds of Long Island. "A melancholy day," says that journal, "it was for Blisville, for the cohorts of the law came down on the cow-stables and made bloody work among the chief sufferers from pleuro-pneumonia!" Hostile demonstrations were made by the "roughs," and the *Herald* reporter was mobbed. It appears that in New York and New Jersey the authorities are setting to work in earnest to stamp out the disease. We wish them success.

Eighteen valuable beests have died at Willington, near Eastbourne, in consequence of eating branches of yew trees.

A Kentucky paper states that mules are being sent *via* the Mississippi River and the port of New Orleans to Europe. This is the beginning of a movement which has long been talked about, and which may result in much of the grain exported from the States drained by the Missouri and the Mississippi being sent to Europe that way instead of by rail to the Eastern seaboard. This subject has been mooted from time to time in the columns of the *Mark Lane Express*.

The price of maize is lower in proportion even than the price of pork in America, so that it appears to pay to raise and feed pigs at the low rates now obtaining there. Mr. Heaps writes to the *American Stockman* the following particulars to prove the foregoing statement: "Hogs are confined to the corn belt, but the cattle range is everywhere. So also with the sheep; their native home appears to be in Colorado, Nebraska, New Mexico, and in fact all the mountainous country of the West, where disease is almost unknown and where they can be raised and cared for with but little expense." (Query—what disease affecting sheep is here alluded to?) "A few figures will help a little to show how hogs pay. Mr. M. a few days since shipped ninety hogs, average 400 pounds, which sold for 1,458 dols.; deducting freight, yardage, and commission—85 dols.—leaving a net balance of 1,373 dols. Now, allowing forty bushels of corn to the hog, and that is enough, it took 3,600 bushels of corn to make these hogs, and 1,373 dols. for 3,600 bushels of corn makes a little over thirty-eight cents (1s. 7d.) per bushel for the corn. I have not counted anything for the feeding and trouble of caring for the hogs, as the expense of shelling and hauling the corn to market would amount to as much as the trouble of feeding and caring for the hogs. Another large item in favour of the hogs is the manure. The corn fed to those hogs last summer was

worth thirty cents per bushel, and all that it took to fatten them could have been bought for twenty cents per bushel. Had he shipped that corn, it would have made ten car-loads, and the freight would have been 335 dols. The freight on the hogs was 67 dols., so there was 268 dols. saved in the freight alone." From this it would appear that America can well enough afford to send us pork and bacon at the present low rates.

The fourth annual sale of the Hon. Neil Black's Short-horns was held on the 10th of January, at Terang, Victoria, Australia, before an assemblage of about 300 persons, of whom several were visitors from Queensland and New Zealand. Not a single reserve was placed on any animal, and everything offered was sold. Several beasts were withdrawn through accidents. Six stud bulls averaged £93 12s. 6d.; total, £561 15s. 9d. Nine stud heifers averaged £98; total, £882. Eighty Shorthorn bulls averaged £22 10s. 2d.; total, £1,800 15s. Ninety-seven pure Shorthorn heifers averaged £25 13s.; total, £2,488 10s. Grand total of sale, £5,733.

The pure-bred Shorthorn herd belonging to Sir Wm. Miles, Bart., of Leigh Court, realised a total of £1,391 15s. 6d. for 62 animals—an average of £22 9s. each.

Mr. Lawrence Drew's sale of Clydesdale horses and Ayrshire cattle will take place at Merryton House Farm, near Hamilton, on Tuesday, April 8th, at half-past 12 o'clock, the auctioneer being Mr. James Marshall, of Carlisle. The catalogue contains portraits of the horses, of which 15 are mares, 19 fillies, 11 colts, and two geldings. Of the Ayrshires two are cows and five heifers.

We have received from Mr. Samuel Gardiner, of Bundoora Park, near Melbourne, Australia, two very tastefully got up catalogues; one of his Brunswick herd of Shorthorns, and the other of his trotting stallions, fillies, thoroughbred yearlings, and brood mares, sold on the 31st of December. Both catalogues are admirably illustrated.

On the 9th ult. Lord Skelmersdale's Duchess of Ormskirk added to the Lathom herd a white heifer calf by Third Duke of Underley (38196). On the 12th Lord Dunmore's Duchess 114th calved a red and white bull calf, by Second Marquis of Oxford (37055). In the Ardferd herd a roan heifer calf by the Warlabull Royal Halsnaby (39041) was dropped by Riby Marchioness, Mr. Crosbie's 1260 gs. purchase at the Aylesley sale in September, 1875, when she was only five months old.

The *Irish Farmers' Gazette* states that rot has prevailed to an unusual extent during the past winter amongst Irish flocks, and that the disease has caused mortality upon many farms where it was hitherto quite unknown. In many instances the owners of sheep, frightened by the appearance of rot amongst their flocks, have sold out every sheep they possessed—sound as well as unsound, and there is no doubt a number of these sheep went to Liverpool. In fact, a number of them have been seized and condemned as being unfit for food, at Liverpool.

Despatches received from Chicago reiterate the denial recently given of the existence of pleuro-pneumonia in that district. The Collector of Customs at Chicago believes that no diseased cattle whatever have been exported thence. The authorities of Pennsylvania, in conjunction with those of New York and New Jersey, are taking steps to eradicate pleuro-pneumonia in those States.

It is stated that Hillier's Bacon Curing Company (Limited), of Newmarket, near Stroud, have offered a prize of £5 under the auspices of the Gloucestershire Agricultural Society, "for the best six fat pigs under one hundredweight to meet the requirements of bacon

curers in suiting the public taste, and not to exceed in weight, alive, 240lb. each pig."

On the 14th ult. Mr. Simon Beattie, of Preston Hall, Annan, Dumfriesshire, shipped from Liverpool by ss. Dominion, to Mr. Blodgett, Waukegan, Illinois, U.S.A., three Clydesdale stallions, all rich dark bays, and from the most noted strains in Scotland, viz., Young Warrior, a 3-year-old of great substance; Merry Farmer, a handsome neat horse, full of quality; and Lofty 3rd, a large powerful 5-year-old horse. Mr. Beattie will sail for Canada on the 28th instant, with a pair of Percheron mares which he selected in France, six Clydesdale stallions and one Cleveland bay stallion, a draft of pedigree Short-horns, and a number of Cotswold and Shropshire sheep.

The *North British Agriculturist* states that on the 8th ult. the following Clydesdale stallions, purchased by Mr. Henry P. Vaurenen, through Mr. Thomas Dykes, of the Clydesdale Horse Society, left London for Melbourne, by Messrs. Money, Wigram, and Co.'s steamship Northumberland—viz., Gleniffer (261), bred and owned by Mrs. Gemmell, Caplaw, Neilston, by Kerr's Conqueror (196), dam by Hercules (378), by Rob Roy (714); Tillside Chief, by M'Robbie's Scottish Chief (764), and bred by Mr. Thompson, Baillieknowe, Kelso; Young Rose, four-year-old, by M'Kean's Prince Charlie (629) dam by Lochfergus Champion (449), bred by Mr. John Gordon, Culraives, Kirkeudbright; and Young Byron, bred by Mr. Houston, Hill Farm, Castle Douglas. Gleniffer is well known in the west country, having won third prize at the Highland and Agricultural Society's show at Glasgow in 1875, and second at Aberdeen in 1876.

THE PRESERVATION OF ANIMAL FOOD.—Dr. B. W. Richardson gave a lecture at a meeting held in the rooms of the Society of Arts, John Street, Adelphi, on Monday evening, on the subject of "Researches in Putrefactive Changes." Like previous lectures of the same series, it had reference to the preservation of animal food. The lecturer brought forward the results of a variety of experiments that had been made recently in the preservation of meat during voyages to and from different parts of the world, and said he came to the conclusion that the prospects of further research in that direction were exceedingly hopeful. Now that the proper lines of experiment had been determined, it was waiting to ensure complete success that those lines should be followed out. It would take some two or three years yet before that desirable consummation could be brought about, but Dr. Richardson believed that the problem would very soon be solved. It was possible that something better than the present chemical preservatives would be found; but success must come long by these or similar means, among which, no doubt, coal gas would continue to hold a prominent place. Referring to the question of the comparative value of animal and vegetable food, the lecturer said that while vegetarians had on their side the advantage of cheapness, they had also considerable reason in their arguments as to other points. The difficulties which beset their way were not insurmountable, but an inquiry was demanded on the point whether the transmutation of vegetable food which was now obtained by the digestion and passage of the blood into the tissues of the lower herbivorous animals might not be affected by chemical processes apart from the intermediate animal altogether. Let men of science, in patient research for a few years, follow up the artificial digestion and condensation of vegetable foods by synthetical imitations, and assuredly the perfect production of perfect food from the vegetable kingdom, without the aid of the intermediate lower animal, would be another triumph of science over nature. In the presence of such a development food of the best kind would become the cheapest of all products, and would be so under the control of man that new races of men, constructed on better food than has ever yet been prepared, would rise up to demonstrate the greatness of the triumph by their improved physical endowments and their freedom from diseases which must always occur so long as other living animal bodies are demanded for the reconstruction of the human body.

## SHOW AND SALE OF AGRICULTURAL HORSES AT BIRMINGHAM.

This was the inauguration of what is intended to be an annual show and sale of agricultural horses, chiefly stallions; and it will likely meet a want which is now felt in the Shires, namely, a mart for horse-breeders' stock. Sellers will find it useful as an outlet for young stock, and buyers will have the opportunity of seeing a large collection of good animals. This first show and sale had much to recommend it to the public, and we shall be glad to see it successfully continued. There were present many horses of note from our best breeders, not entered for sale but merely in competition for the prizes, which amounted to a sum of £350. The Earl of Ellesmere, for instance, sent some of the best of his stud, and many winners at our best shows were exhibited by other breeders; probably with a view to support the show and encourage the sale by their prestige, as well as to prospective business. The judges passed over several noted animals now getting on in years apparently in favour of younger and therefore more useful horses; at all events, their decisions were not at all times intelligible on any other supposition. Thus in the class for Clydesdale stallions of any age, Mr. Crowther's Topsman, and the Duke of Beaufort's Paragon Tom, which were respectively first and second at the Royal last year, were passed over without so much as a commendation, and the first prize given to a five-year-old horse, Sir William Wallace, belonging to the Stand Stud Company. This horse was well-ribbed and had a good crest, but his arms and thighs were small, and he did not look like a winner. Mr. J. Forshaw's Ben Nevis, the second prize winner, was a very useful horse. Mr. Taverner's Young Lofty was also passed over without honours. There were 15 entries in this class.

In the class for agricultural stallions other than Clydesdales there were 46 entries. Mr. J. Forshaw's What's Wanted was placed first, after a long consideration. This horse has a plain head, badly set on, is light in his barrel, and rather small in his thighs; but his bone is good and his legs flat and clean. The Earl of Ellesmere's British Wonder, a four-year-old chestnut, was placed second; this horse was second at the Liverpool Royal as a two-year-old, and is a very compact horse with beautiful crest, short back, excellent shoulders, and is well-ribbed, but his legs are round, and he is not of the type which best suited the judges. Neither of these horses were for sale. Lord Polwarth's Harden, a four-year-old bay, was placed third on the list, and he is a very useful horse, not very big, but very compact, and of an excellent colour; he was sold for 126 guineas. The fourth prize went to Mr. G. Jones' Leviathan, a big chestnut four-year-old, with excellent forehead, and a good mover. Amongst the notables passed over by the judges was Young Champion from the Stand Stud Company, twelve years old, and the winner of many a prize card; Mr. Wm. Wynn's Nonpareil was in good fettle, but he obtained merely a high commendation, which the groom put out of sight, as being an insult to the old horse; Mr. Crowther's Carleton Tom, winner of first prize and gold medal at Paris, was only highly commended; and the Earl of Ellesmere's Samson 2nd, first at the Liverpool Royal as a two-year-old, was not noticed at all. There were some good serviceable horses in this class not honoured by the judges, amongst which may be mentioned Sir R. Philip's Al, and Mr. R. Morgan's Duke of Cambridge, a six-year-old bay, which realised 180 guineas under the hammer.

There were 19 entries in the open class for agricultural stallions rising three-years-old, and a very promising lot they were, on the whole. A Clydesdale was the winner,

Clydesdale Tom, a big dapple grey, bred by Mr. James Galbraith, and exhibited by Messrs. Yeomans Brothers, of Wolverhampton; the second prize going to Mr. J. Forshaw, for a very promising bay—neither of them being for sale. The Earl of Ellesmere sent three horses to compete in this class, Young Prince of the Isle (3rd prize), Knight of the Shires, and Lofty. Colts rising two years old were 16 in number, the first prize going to Mr. John Nix, for a Lincolnshire horse, Boston, and the other two prizes to the Earl of Ellesmere for Lord of the Shires and Samson 4th. The Earl of Ellesmere was also first and second with yearlings, of which there were but 8 entries. There were a few good Clydesdale mares, and 22 shire-bred mares of one sort and another, the Earl of Ellesmere securing first and second honours easily. There were two roadster stallions, Mr. T. Upton's Young Quicksilver, and Mr. Redman's Octavian; also a thoroughbred, Mr. Clarke's Young Australian; all of them old horses sent for sale, but they were, apparently, bought in. There were also some useful working geldings, which sold well.

The total number of entries was 163, the cart stallions in the several classes numbering 104. Mr. Cave, the auctioneer, offered a prize of £50 for the best stallion in the yard, on condition that the horse should stand or travel within 15 miles of Birmingham, but unfortunately the condition could not be complied with. The show and sale was very well arranged, and was completed without accident.

## PRIZE LIST.

JUDGES.—H. J. Cartwright, Wolverhampton; H. Lowe, Tamworth; A. Smith, Haddington.

Clydesdale stallions of any age.—First prize, The Stand Stud Company, Whitefield, near Manchester (Sir William Wallace); second, J. Forshaw, Blyth, Workop (Ben Nevis); third, The Stand Stud Company (King of Clyde).

Agricultural stallions other than Clydesdales, rising four years old and upwards.—First prize, J. Forshaw (What's Wanted); second, Earl of Ellesmere, Worley Hall, Manchester (British Wonder); third, Lord Polwarth, Mertoun, St. Boswell's (Harden); fourth, G. Jones, Stowbridge, Downham Market (Leviathan).

Entire colts, rising three years old.—First prize, Messrs. Yeomans Brothers, Pennymore Hay, Wolverhampton (Clydesdale Tom); second, J. Forshaw (Temptation); third, Earl of Ellesmere (Young Prince of the Isle).

Entire colts, rising two years old.—First prize, J. Nix, Outseats Stud Farm, Alfreton (Boston); second, Earl of Ellesmere (Lord of the Shires); third, Earl of Ellesmere (Samson IV.).

Entire colts, rising one year.—First prize, Earl of Ellesmere; second, Earl of Ellesmere; third, Messrs. Yeomans Brothers.

Clydesdale mares of any age.—First prize, A. Montgomery, Boreland, Castle Douglas (Mons. Meg); second, A. Montgomery (Bell); third, R. Loder, Whittlebury, Towcester (Jesse).

Agricultural mares, other than Clydesdales, rising four years old and upwards.—First prize, Earl of Ellesmere (Beauty); second, Earl of Ellesmere (Honest Lady); third, E. Singleton, Preston Deanery, Northampton (Topey).

Agricultural geldings or fillies rising three years old.—First prize, Earl of Ellesmere; second, Earl of Ellesmere; third, R. H. Griffin, Borough Fen, Peterborough (Duchess).

Agricultural geldings or fillies rising two years old.—First prize, Earl of Ellesmere; second, R. Loder, Whittlebury, Towcester (Jeannie Sproat); third, R. H. Griffin (Violet).

EXTRA SECTION.—Three 25 s. prizes placed at the disposal of the judges, to be awarded in the extra section, which will consist of working cart horses, van horses, horses suitable for tram or omnibus purposes, and other horses entered for sale, preference being given to those entered by the breeders.—Working horses: Prize, G. Graham, The Osklands, near Birmingham (Short). Prize, R. Tommas, Winslow Green, Birmingham. Prize, G. Smith, Auckland Road, Camp Hill, Birmingham.

The horses for sale were put up by auction by Mr. W. C. B.

Cave, and there was a fair competition for them; but the large reserves put upon many of them prevented their sale. Mr. Wm. Conroy's John Bull was bought in at 900 gs., the reserve being 950 gs.; the reserve on Mr. B. Cochran's Ruler was 500 gs.; that on Capt. Betts's commended two-year-old Wonder, 950 gs.; and that on Mr. J. F. Crowther's Champion Tom, 650 gs. Mr. Arthur Lang's highly commended Clydesdale stallion, Sir John, was not sold, the reserve being 380 gs., but Mr. Cave is trying to make arrangements with the owner for this grand horse to stand at his Moseley Street stables during the season. The following were among the prices realised:—Mr. P. Hastie's North Briton, 80 gs.; Mr. H. Andrews' unnamed black Clydesdale, 53 gs.; Lieut.-Colonel Williams' Roving Boy, 75 gs.; Sir J. H. G. Smyth's Prince Imperial, 95 gs.; Mr. J. P. Haslam's Honesty, 41 gs.; Mr. J. Nott's Nobby, 71 gs.; Mr. J. Harvey's Staffordshire Bill, 75 gs.; Mr. B. Morgan's Duke of Cambridge, 180 gs.; Mr. A. M. Shepperson's Match Mr., 90 gs.; Mr. W. Wynn's Perfection, 40 gs.; Mr. B. Blewitt's Young Norman, 90 gs.; Mr. J. S. Hack's Black Prince, 51 gs.; The Stand Stud Company's Compact Tom, 60 gs.; Mr. J. Fox's first prize rising two-year-old colt, 150 gs.; Mr. B. Finney's highly commended colt, 92 gs.; Mr. C. Pratt's roan mare, 50 gs.; Mr. G. Fox's roan mare, 45 gs.; and Mr. G. Fox's dark brown colt gelding, 65 gs. Amongst the working horses, Mr. J. Hodgkins's Captain, 60 gs.; Mr. E. M. Coleman's Traveller, 48 gs.; Mr. W. Whitworth's brown horse, 52 gs.; and Mr. J. Elwell's Black Prince, 58 gs.

## THE SHORTHORN AND HEREFORD CONTROVERSY.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I wish for some authority or publication that will, through correspondence, give me the facts that will show the movement of the Hereford and Shorthorn controversy from 1800 to 1840, or substantially covering this time, and would not mind coming down twenty years later.

So far as this country is concerned, I claim that the Herefords have suffered from the fact that the Shorthorn men have controlled the agricultural societies and the press in the interest of the Shorthorns. It may be answered that the Herefords had the same opportunities. If they did, they did not improve them, and the writers both in England and America that have written up the history of cattle in England and America have written in the interest of the Shorthorns. And the time has come when the verdict in favour of Shorthorns must be revised; and this is being done in this country very rapidly.

I expect to find a good deal of hard work in this; but I know from my own experience that the Hereford is not only a better grazer, but he is a better, a more economical feeder as well, and your market reports show that he is always worth more money.

Will your "Farmers' Magazine" give me the information I want? Will I there find the Hereford side of the question discussed? and have you the back volumes? What would they cost? If this would not meet my want, or if you have not got it, is there anything else that would give me these discussions through the first half of the present century?

The meat question is of sufficient importance to secure the fullest investigation. And I desire to get at the bottom facts; these I am gathering here, and we are making Hereford facts, both as regards grazing, feeding, and quality.

Hoping that the "Farmers' Magazine" will be what I want, and that you have it,

I am, Sir, &c.,

T. L. MILLER.

Beecher, Will County, Illinois, Feb. 26th, 1879.

## MR. BARCLAY, M.P., AND FOREIGN STORE STOCK.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—My attention has been called to a slip on the above-named subject from the *Mark Lane Express* of the 10th current, in reply to which allow me to say, there are doubtless Scotch farmers who, in their dread of a deficient supply of store cattle in spring, and of having to purchase them at a high price to stock their summer pasture, do sympathise to some extent with Mr. Barclay's views. In their desire to see restrictions on the importation of cattle from America relaxed, they shut their eyes to the great danger of importing pleuro-pneumonia along with them; and although it cannot now be denied that this disease extensively prevails in America, our importers to the last have done their best to hoodwink the public in this respect. Scotch farmers, as a body, however, very much dread the importation of this disease—the most difficult of all our contagious diseases to deal with—and are averse to the withdrawal of the present restrictions, however much they may wish the supply of grazing cattle to be increased, as far as consistent with safety to our home cattle; and the great bulk of them view with considerable alarm the efforts now being made by Mr. Barclay and others to increase that supply by permitting the unrestricted importation of cattle from America, so long at least as pleuro-pneumonia is known to exist among the herds of that country. We all know how difficult it is to extirpate that insidious disease when once it has established itself.

Mr. Barclay played an important part in preventing the spread of rinderpest into Aberdeenshire when it visited this country in 1866. His *modus operandi* then was thorough isolation of that county from other parts of the kingdom, and immediate slaughter when a case did appear in it. By these means he, aided by others, saved his native county from that fell scourge, when all other parts of the kingdom were more or less devastated by it; and it is to be regretted that Mr. Barclay should now give his countenance to views so much at variance with those then advocated by him with so much success, and which earned for him a fame in that county at least which will not soon be forgotten. But, alas, *tempora mutantur et nos mutamur in illis*. Mr. Barclay now represents a county in which all are not of the same mind on this subject, his constituency being a mixed one of town and country population, and our M.P. has to steer his bark through a difficult channel, between a Scylla on the one hand and a Charybdis on the other, and of course while straining a nerve to avoid the one there is a danger of coming to grief upon the other. *Verbum sat*.

I am, Sir, &c.,

FORFARSHIRE.

21st March, 1879.

## TYPHOID IN PIGS.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—Having lost several pigs during the last few years from the above disease, and being unable to detect the cause, I turned my attention to the water they drank, which was very clear and supplied from a large pond, and I found therein "sewage matter." I may also say that similar cases which have happened in this neighbourhood have been traced to the same cause.

Since then I have used spring water and have not lost a single pig.

I am, Sir, &c.,

Bolton Hill, Ipswich.

CHAS. GOCHNER.

## FARMERS' GRIEVANCES.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—Before passing on to the next head of my discourse, I have a parting word to say of my last.—[See p. 214.]

Did I not know that farmers and their friends did not know what they would be at, I should be inclined to ask them what they really would be at. They call for Parliamentary representatives of their interests; for tenant farmer members; for chambers of agriculture, not for agricultural, but for tenants' purposes; for tenant farmers' associations, from which landlord farmers, even ex-tenant farmers, are excluded. They have had their Agricultural Holdings Bill, and much good may it do them. Your journal tells us the whole tenantry of Dinton and Haddenham have, by preconcert, intimidated simultaneously that they will give up their farms unless their rents are materially reduced. And yet "A Man of Mark Lane" is indignant at the imputation of several journals, that the tenantry are turning trades unionists, in the very page in which he counsels a National Farmers' Association, with federated committees in every county, to command an organization "to assert and maintain the political rights of their class!" Why this is just the cry of labour parliaments, working men candidates, the representation of labour. *Mutato nomine—* "the proverb is somewhat musty."

Political rights! Pray what political rights have farmers different from those of other citizens and subjects? What have politics, what has Parliament, to do with the material condition of the tenantry, and their relations with their landlords? Speak out! Let us understand each other. Is it meant by mere vote power at county elections to extort by Act of Parliament from owners of land concessions which are not to be had by free covenant, and are incompatible with the ordinary rights of ownership? In short, is it meant to muster such a counting of noses at the polling-booth as will effect the passing by statute of provisions that will practically confiscate the freehold rights of land tenure? Why this is Joseph Arch and the Trades Union Conference all over. It smells in every line of the Amalgamated Engineers and Mr. Macdonald. Let us all go to Parliament for everything we want to get out of other people—help ourselves by statute of the realm to the contents of our neighbours' pockets, and "patron" free trade while we are all looking to make our bargains, not by free covenant, but by compulsion of statute, and the votes of our county members.

Again I ask, Do your political tenantry really know what they would be at? No clamour is louder than that for fixity of tenure. And yet—will it be believed—there are literally thousands of English tenants who refuse leases. *Vestit in senatu—etiam in senatu venit.* Mr. Lane, of Broom Court, one of the leading oracles of the new Warwick Association, "was turned out because he would not have the proposed lease hung about his neck," and "A Man of Mark Lane" tells me of the "collapse of Scotland, where a lease is not a panacea for agricultural evils." The same writer assures the world that a "Tenant-Right in England is urgently needed," while he assures me "Englishmen never asked for anything on the same principle as the Irish Land Act," and winds up by charging me with a communistic proposition in suggesting that if modes of tillage are to be prescribed for owners and tenants, they had better be regulated on a uniform principle by an independent and public officer.

I conclude by a Partisan glance at the jeremiad of your correspondent "A Sufferer." By that well bull-ragged Law of Distress, he says the ruthless landlord can "rush into the house of the tenant without giving any notice

whatever, and leave there an individual whose presence is not likely to contribute to the happiness of the family; whereas if the landlord had only the same remedy to recover rent as the trader—and it is most unjust to the trader that the landlord has priority, which generally ends in the whole effects being absorbed for rent and large expenses—the tenant would in all probability, by selling his produce to the merchant or dealer, be able to continue his tenancy, to save his reputation, avert the invasion of his "castle."

Is it then incompetent for any ordinary execution creditor to "rush into the house," the tax, tithe, or rate collector? Can the "invasion of the castle" by "the trader" be "averted" any better than from the landlord? Nay—is it not just the landlord *alone*, who, because of the security which the law of distress gives him, need *not* "rush into the house" and may prevent every body else from doing so, while the tenant may have six years to recover from bad crops, and to catch the best time for high prices for grain and stock? Why may not the tenant "save his reputation" by paying his rent out of the proceeds of "a sale to the merchant?" Perhaps "A Sufferer's" grievance is that he is not allowed to put those proceeds in his own pocket, and to leave the rent "an insoluble quantity."

For the typographical errors in my former letters perhaps a not too legible manuscript is to blame.

I am, Sir, &c.,

SIDNEY SMITH.

*The Manor, Feltham, March 20.*

[Our correspondent has not studied "farmers' grievances" to much purpose if he does not know the difference between the English and the Irish demands for Tenant-Right. The former is simply a demand for payment for value received; the latter includes compensation for disturbance, and rents valued by arbitrators. It appears, too, that Mr. Smith is unable to conceive of tenant-farmers combining to get real instead of sham representatives without having other objects than the reform of long-neglected agricultural abuses in view, or that tenants can unite to alter laws which allow their pockets to be picked, without having a design on other people's pockets. We entirely fail to see where he traces a connection between a combination of tenants on two particular estates to get rents reduced and a proposed national political association.—Ed.]

**THE COUNTY BOARDS BILL.**—At a meeting of the Labour Representation League, held at the offices, 27, Villiers Street, on Saturday, Mr. G. G. Taylor in the chair, the following resolution was passed unanimously:—"That this meeting, having considered the provisions of the County Boards Bill, expresses its opinion that the measure is far from being satisfactory; and is further of opinion that any legislative dealing with county administration should be based upon the following principles:—1st. That there should be but one election for all purposes of county government. 2nd. That every male ratepayer should be eligible to serve upon the board. 3rd. That every ratepayer in the county should be entitled to vote for the election of members to the board. 4th. That the board so elected should appoint from its members the various committees for local purposes, including that for the relief of the poor, but that no rates be levied, except by the vote of the whole board.

**EAST KENT CHAMBER OF AGRICULTURE.**—At a special general meeting of this Chamber, held on Saturday at the Guildhall, Canterbury, Mr. Basil Hodges in the chair, a paper was read by Mr. Bernard Dyer, F.C.S., A.I.C. (Consulting Chemist to the Devon County Agricultural Association, North Chamber of Agriculture, &c.), on "The Analysis of Artificial Manures, and the Buying and Using them to Advantage; with Some Observations on the Unexhausted Value of Feeding Stuffs." We shall give this paper in an early number.

# Agricultural Reports.

## ESSEX.

No so much sunshine last week; white frosts and slight snowfalls; land favourable for cultivation; and ploughs busy. Manured our land for mangel direct from the covered yard, where each young man filled twenty carts in ten hours. Six acres were thus quickly manured without the intervention of a dunghheap and twice handling. The manure is now being spread, after which the land will be ploughed and subsoiled, the first plough with two horses being followed by another plough, minus the breast-drum, by three horses. In our thirteen acres (chapel land) the powerful steam plough in 1874 left us a legacy of hard work in every subsequent tillage. It was a great and unprofitable mistake to bring to the surface so much of the glutinous yellow plastic subsoil, and many have had to regret their indulgence in disturbing too deeply these tenacious soils. Had there been a subsoil plough attached to the upper one (as was done on my farm some twenty years ago), the mischief would have been avoided, for the surface silt would have still laid upon and turned over subsoil; a top dressing of poor subsoil two inches thick (which would be 200 tons per acre) placed on the old seed bed is by far too much of a bad thing, for I am more and more convinced that it is in the upper crust that plants fibre most abundantly, the deeper roots supplying moisture to the plants in dry weather. At four feet apart from row to row I have found, as early as August, the whole intermediate space filled with the fine fibre of the mangel plant. For thirty-six years I have been a deep cultivator, but always keeping the subsoil, when broken, under the surface soil, the manures falling between the two. Lambing successful, mostly twins, only 16 to complete. We suffered less where the land was only steam ploughed, and then next year again steam ploughed, so that the bad soil was sent down again; but where after steam ploughing the land was steam cultivated, the bad subsoil got inextricably mixed with the better soil, much to the injury of the crops. The corn crops suffered more than the root crops.—J. J. MECHI, *March 17*.

## NORTH ESSEX.

March dust we have had but scarcely so much of it as we could desire; so far we have never had the land thoroughly dry and it is only the really heavy lands which have frost-made moulds on the surface that have worked satisfactorily for the barley seed. All medium-mixed soils, especially those that have been trodden by sheep at any time during wet weather, require a great deal of tillage before they can be reduced to anything like a fitting state for that grain, which is so jealous of a dry bed; a great deal of patience is needed in dealing with soils in the condition referred to, for the difficulty is to meet with four or five acres in the same field that require the same amount of work and the same treatment; for instance, five or six folds were stamped when the earth was frost-bound, the next two or three folds were stamped when the earth was wet, the former ploughing with plenty of free moulds, the latter ploughing up tough and cold, thus demanding three times the labour to be bestowed upon them, and even then the tilling is not perfect. Except in the heavy lands but little barley has been planted hitherto, and where it has been hurried in not much judgment has been shown. Farmers should remember that the season is very backward, all negatives being very tardy in progress—the wheats in many districts only not showing—so that relatively speaking the sowing is not backward; thus there is no need for careless speed; far better to work thoroughly two thirds of the

barley course and put in the remaining third somewhat later, than to hurry all in in an unsatisfactory state, for though as a rule the earlier-sown barley does the best, that is not always the case, therefore it is bad policy to scamp the tillages. The growing wheats must be regarded from too points of view; on the close soils, where the seed was deposited in a dry bed, we may speak of the plants as being good and strong but very backward; on the lighter mixed soils the plants is very deficient owing partly to the activity of the wireworm and partly to the very exposed condition of the land during the most severe and prolonged frosts we have had for many years. The breadth of land occupied by this grain, which for obvious reasons is no longer the farmer's pet, is considerably less than usual, and speaking from present appearances we do not look for a large crop; the lighter soils especially run the risk of being exposed to the exhausting influences of the sun before the land is shaded by the plants, which means that the growth of the young plants would be prematurely arrested, while on the other hand, supposing forcing weather supervenes—showers alternately with oppressive gleams of sunshine—the wheat runs a great risk of becoming mildewed. It is very sad to see the indifference which is displayed in too many cases in many vital operations on the farm; there is a *laissez faire* style about the whole conduct of agriculture which bodes no good either to landlord or tenant, and it is just such a state of things which will have its own revenge; land bearing foul and impoverished farms getting bad names, and hundreds of farms in this county either begging for tenants or soon to fall into the landlords' hands. What are to be the remedies for this state of things? Whatever the list may include certainly the nostrum of protection must not have a position there.—W. D. March 20.

## THE INTERNATIONAL AGRICULTURAL EXHIBITION.

Colonel Kingscote, M.P., presided on Wednesday over a meeting of the Exhibition Committee, at the Offices of the Royal Agricultural Society, in Hanover Square, for the purpose of considering the reply of the Ecclesiastical Commissioners to a deputation which waited upon them last week with the view of urging the speedy completion of Brondesbury Road, Kilburn, which is situate close to the site of the Exhibition. The reply stated that the Commissioners did not feel justified in sanctioning so large an expenditure as they were asked to make, unless they could be assured that some substantial contribution (say £400 or an equivalent thereto) be offered to them. After some discussion, it was resolved, on the motion of Lord Richard Grosvenor, M.P., seconded by Mr. Charles Hambro, "That the offer of the Ecclesiastical Commissioners be declined with thanks, owing to the inability of the Royal Agricultural Society, or the Mansion House Committee, to raise £400 towards making the extension of the Brondesbury Road."—The arrangements for this exhibition are fast approaching completion, and the show-yard works are being rapidly pushed forward. Progress is also being made with the new railway siding of the London and North Western Railway at Salusbury Road, Kilburn, which is adjacent to the site of the Exhibition, and will be very convenient for the loading and unloading of stock, produce, and implements. In addition to the vast collection of valuable animals, agricultural and horticultural requisites, miscellaneous goods, English and foreign hops, cider, perry, butter, cheese, hams, preserved meats, bees, hives, and a comparative museum of ancient and modern implements, preparations are being made for a horticultural display, tastefully arranged along the sides of a railway embankment, which is included in the one hundred acres set apart for the Exhibition.



## GLASGOW STALLION SHOW.

On Feb. 25 the annual show of Clydesdale stallions was held on the Cattle Market Stance, Duke Street, Glasgow. The weather was the best possible for the occasion—the air being frosty, and, with the exception of an hour or so in the morning, clear and bracing. There was as usual a large concourse of spectators, and the scene inside the showyard was of the liveliest description all day up till the hour of closing. The total number of entries this year shows a slight decrease upon that for last year. The total decrease is 17. This, however, is accounted for by the fact that there was this year no class for thoroughbreds, the directors having decided at a recent meeting that Clydesdale stallions should alone compete. Judging commenced at ten o'clock in both rings, and for several hours the interesting and important task of weeding out was carried on in the presence of over 25 deputations and a crowd of interested spectators. In the aged class it was nigh two o'clock before the judges had come to a select few. After going through the whole class, the judges retained a lot of five, from which again two—Strathclyde, belonging to Mr. P. Crawford, Dumgoyack, Strathblane, and bred at Dunglass, South End, Campbelltown, and which took the first prize last year; and Breastknot, the property of Mr. D. Riddell, Blackhall, Paisley, and bred by Mr. Paterson, Bonnybridge—were shortly picked out to compete finally for the honours. In many points the two horses were equally good, and it was not without considerable difficulty that the judges could come to a satisfactory decision. At last however, the premium fell to Mr. Riddell's horse Breastknot. This horse, which is a powerfully-built but graceful animal, is comparatively young, and travelled in the Dumfries district last year. In the three-year-old class the judges did not find great difficulty in selecting a few probable winners; still the task of deciding to which the premium should go could not be performed without a close inspection of their several merits. The list was ultimately reduced to two, the horses being Mr. Johnston's (of Lochbarrie) Roderick Dhu and Mr. Riddell's Rosebery, and the prize was awarded to the former. The prizes and prize-winners are as follows:—

Class I.—For the best stallion foaled before the 1st January, 1876, and not above ten years old, the Society's premium of £100—David Riddell, Blackhall, Paisley. Breast not, bay, aged 5 years; bred by Mr. Paterson, Bonnybridge; sire, Time o' Day.

Class II.—For the best stallion foaled after 1st January, 1876, the Society's premium of £100—James Johnston, Lochbarrie, Maryhill. Roderick Dhu, dark brown, aged 2 years and eight months; bred by Lawrence Drew, Merryton, Hamilton; dam, Bessie.

As already stated, a large number of deputations from other societies throughout the country were present for the purpose of selecting horses to travel during the ensuing season in their respective districts. The following were among the selections, with premiums.

Dalbattie Agricultural Society (Premium, £100)—Mr. Hugh Andrew, Lennoxlove, Haddington, Lothian Chief, dark brown horse, rising five years. Carrick Farmers' Society (£100)—Mr. David Riddell's Gold Dust, dark chestnut, four years old. East of Berwickshire Horse Club (£100)—Mr. John Howatson's (Kailwood, Stewarton) Prince Albert, bright bay horse, rising six years. West Teviotdale Agricultural Association (£100)—Mr. Peter Ferguson, Renfrew, King William, a dark bay, aged four years and eight months. Kintyre Agricultural Society—Mr. James Kerr's (Kilbirnie) New Style, a dark brown, rising seven years. Wirral and Birkenhead Agricultural Society (£120)—Mr. Thomas Statter's (Manchester) Sir William Wallace, a bay horse, five years and

seven months old. Netherby Horse Society—Mr. Peter Crawford's Clydesdale Hero, brown horse, aged two years and nine months. Dunblane, Doone, and Callander Farmers' Club (£50)—Mr. Gavin Jack's (Corstorphine) Chieftain, a bay horse, aged two years and nine months. Dumfries Agricultural Society (£100)—Mr. Peter Crawford's Ivanhoe (the winner of the £100 premium at last year's show). Angus Agricultural Society—Mr. James Alexander's (Kilguth) General Williams, a light bay, 8 years and 8 months old. Eastern District of Kirkcubright (£80)—Mr. Peter Crawford's Strathclyde, who gained the Glasgow Society's silver medal as a three-year-old at last year's show. Bute Farmers' Club (£100)—Mr. John Hendrie, Coatbridge, General Neil. Penrith Agricultural Society (£100)—Mr. James Kerr's (Kilbirnie) Lothian Prince, a dark brown horse, rising three years. Ardrossan District Society (£100)—Mr. Thomas Denholm's (Whilbunn) Glengarry. Kintyre Agricultural Society (£100)—Mr. William Stevenson's (Bishopbriggs) Farmers' Fancv. Dumfries Agricultural Society (£100)—Mr. David Riddell's Chancellor. Lauderdale Agricultural Society (£60)—Mr. Peter McRobbie, Aberdeen, The Chieftain. Denbighshire and Flintshire Association (£100)—Mr. John S. McRobbie, Aberdeen, The Viceroy. Girvan District Society—Mr. Alexander Brewster's (Bairraih, Kilmacolm) Young Pride of Scotland, bright bay, aged 3 years and 7 months. Peebles Stud Horse Association (£100)—Mr. Andrew Montgomery's (Boreland Castle-Douglas) Farmer, bay. Avochearn Horse Society (£100)—Mr. James McNab's (Menastrie) Champion of the North, light bay, aged two years and nine months. Inveraray Pastoral Society (£50)—Alex. Robertson's (Kilwinning) Young Favourite, dark brown, aged two years and eight months. Arran Farmers' Society (£80)—Mr. John Paton's (Renfrew) Baron Renfrew, dark brown, aged 4 years and eight months. Lillithgow Society—Mr. D. Riddell's Rosebery, bay, aged 3 years. Machars of Wigtown—Lord Derby, which was selected for this district for the previous two years. Poltalloch District Society (£80)—Mr. Peter Ferguson's (Renfrew) Sir Colin, dark bay, aged 4 years and eight months. Upper Cowal (Tighnabruach) Society (£60)—Messrs. Thomas Biggar and Sons' (Dalbeattie) Beaconsfield, dark bay, 2 years and 8 months. East Berwick Horse Club (£80)—Mr. Robert Duncan's (Dunlop) Pride of Dunlop, brown, 2 years and 10 months.

## SALES.

In addition to these premiums a number of sales were transacted in the yard during the course of the day. The principal sales were:—Modern Type, brown, aged four years, belonging to Mr. John Brown, Lassensmoss, Kilwinning, sold to the Stand Stud Company, Manchester, for £300; Sir William Wallace, bay, aged five years and seven months, belonging to Mr. R. MacIndoe, East Wilkieslaw, Paisley, sold to Mr. Thomas Statter, Stand Hall, Manchester, for a large sum; was afterwards sold to travel for the Wirral and Birkenhead Agricultural Society; Gleniffer (not catalogued), belonging to Mrs. Gummill, of Copelaw, sold to go to Australia for a large sum; a dark brown belonging to Mr. P. Wright, Knock, Renfrew, sold to Mr. Robert Hardie, Carnoustie, for service in Forfarshire; Tillade Chief, dark bay, aged six years, belonging to Mr. George Young, jun., Blue Bell Inn, Pallinsburn, to go to Melbourne; Alexander the Great, bay, aged two years and nine months, belonging to Mr. Peter Crawford, Dumgoyack, Strathblane, sold to John Hart, Port Adelaide, Australia, for £1,000; and Clan Alpine, brown, aged two years and four months, belonging to Mr. J. Johnston, Lochbarrie, Maryhill, sold to Mr. Jacob Wilson Manor Park, Morpeth.—*Sculsman.*

General Le Duc, Commissioner of Agriculture, U.S.A., has received from a correspondent in Egypt a proposal to export horses for carriage purposes to that country, making use of the lines of steamers which trade direct from America to Gibraltar and Genoa, whence the animals could be transhipped for Alexandria, with the hope of getting this class of horses cheaper than from England. There seem to be no bounds to the commercial enterprise of our American cousins; they have already commenced sending grain to Spain, and there is no knowing but they may send coals to Newcastle.



## THE FARMERS' CLUB ON AGRICULTURAL ASPECTS AND PROSPECTS.

Mr. Scotson was on the right tack when he summed up his proposed remedies for the difficulties which British farmers are in, owing to the altered conditions of agriculture, although the first clause of his sentence is open to objection. He said: "Landlords ought in justice to lower their rents, abolish restrictive covenants, preserve less game, give security of tenure and compensation for unexhausted improvements, and encourage by every other means a more liberal outlay on the land." We have often before objected to any attempt to lay down the law as to what landlords "ought" to accept in the way of rent, which, as Mr. Scotson admits in another part of his paper, is to a great extent ruled by the proportions of supply and demand. That they would be prudent to reduce rents, in order to avoid the run down which a farming panic would produce, is quite a different statement. Similarly, it is quite reasonable to urge landlords to show some sympathy with their present tenants, and to accept less rent from them rather than wait till these hard-pressed men are ruined, and then accept less still from strangers. Whether a man "ought" in any case to take less than the utmost he can obtain for a commodity which he possesses is a question of abstruse ethics which must be left to his own conscience to determine. This, at least, is certain, that no other man has a right to tell him that he "ought" to do so. Anyone may advise him as to what is prudent from a far-sighted point of view, and anyone may plead with him to let kindly feeling have some sway in his commercial transactions; but more than this is an unwarrantable dictation. On the other hand, it is perfectly legitimate, as we believe it is reasonable, to declare that rents *must* come down; and as they are coming down already there is no prophetic rashness in the declaration. Similarly, we should prefer to say that landlords would, if they were wise, abolish restrictive covenants, rather than that they "ought" to do so. That they "ought" to preserve less game we think is a fair axiom, as nothing is more firmly established as a moral doctrine than that no one ought to exercise his self-indulgence to the injury of his fellow-creatures. Still more clear if possible is it that landlords ought to pay for unexhausted improvements, which is no more than paying for value received.

The use of homilies to landlords, however, is very questionable, and those which Mr. Scotson repeats have been preached for the last half-century with more or less persistency, not to speak of occasional sermons of the same kind delivered at more remote periods by men who were "before their time." It is slow work to convert a multitude, and one of the chief uses of Government is to insist on people doing what is just to each other, and what is expedient for the welfare of the nation. Instead, then, of telling landlords what they ought to do, it would be more to the purpose to tell our legislators what they ought to compel landlords to do. But even to do this with effect, it is necessary for farmers and others to select their legislators. They must choose men who will promise to reform the Land and Game Laws, give security to tenants'

capital expended in improvements, and otherwise remove the disabilities to agricultural advancement. As to the removal of unreasonable farming restrictions, tenants will be able of themselves to insist on that now that farms rather than occupiers are going begging. The chief lesson for farmers to lay to heart, however, is that agricultural reform must begin at the polling booth.

The discussion which followed the reading of the paper was one of the best that has recently taken place at the Club. Mr. Little's able speech was more exhaustive than the paper, and it was followed by some other good speeches, including a stirring one from Mr. Read. But both Mr. Little and Mr. Read dwelt rather upon the ills which farmers are suffering than upon the remedies for those ills; and this is a common characteristic of agricultural discussions. Farmers are the best hands in the world at grumbling, but the worst at agreeing upon and working for the removal of the causes of their discontent. It is only natural that there should be more unanimity as to the existence of evils than there is with respect to their proper cures, the first being a matter of experience, and the latter one of opinion. Yet we have had the causes of agricultural depression so long under consideration that it is quite time certain first principles in relation to them should be established. Not only this; it is also quite time that the course which farmers should take to rid themselves of the causes of the depression of their industry, as far as these are removable, should be agreed upon. It is in this respect most of all that farmers have failed hitherto. They all agree that agricultural depression exists; a large number of the more thoughtful among them agree—as most of the speakers at the Club did, for instance—that the depression is to some extent caused or increased by certain hindrances to agricultural enterprise which it is undoubtedly within the power of Parliament to remove; yet comparatively few of them take the logical course which this degree of unanimity should lead to—that of determining to use an abundant political power to obtain the removal of the hindrances in question. In short, farmers grumble, but do not fight; and it is not political grumblers, but political belligerents who get their own way. Our army in Zululand might as well hope to subdue King Cetewayo by holding councils of war, as farmers to get their grievances redressed by indulging in choruses of lamentations at their meetings.

One of the most serious of farmers' disabilities is that of being denied security for their invested capital, and this Mr. Read on Monday appropriately termed a national disgrace. The Agricultural Holdings Act has proved to be an utter failure, and there is not the slightest prospect that it will ever be anything else. But members of the governing party in Parliament refuse to admit that the Act is a failure; hence the value of Mr. Samuelson's proposal for a Committee to decide whether it is a failure or not. Hence, too, the appropriateness of Mr. Henry Clark's resolution, passed by the members of the Club through his admirable persistence, although, on account of the ruling of the Chairman, it was not put till after the formal meeting had been dissolved. But Mr. Samuelson's proposed inquiry, if granted, will not be limited to the op-

ration of the Agricultural Holdings Act; it will embrace the condition of agricultural tenancies generally, and thus will take evidence upon various subjects of "constant complaining amongst tenant-farmers. It is most important that the Committee should be granted, and it is well that the members of the Club present at the meeting on Monday passed Mr. Clark's resolution. It would have been still better if the Chairman had taken the sense of the meeting as to whether the resolution should be put in a formal manner from the chair. It is not usual for the Club to pass resolutions, and it is not desirable, as a rule, that resolutions should be proposed unless notice of them has previously been given; but in a serious agricultural crisis like the present we should not stand on trifling considerations of precedent or formality. Indeed, in these stirring times, it is a question which the Committee of the Club may fairly be asked to consider, whether resolutions may not be proposed by readers of papers if they are published beforehand. On many subjects dealt with by the Club resolutions would be inappropriate, but on others they are very much to the purpose, and might be of use. But resolutions alone are not enough, unless the farmers who pass them make known their determination to support such declarations by their votes at the Parliamentary elections.

#### AN IMPORTANT MOVEMENT IN SCOTLAND.

The Directors of the Scottish Chamber of Agriculture have taken a course which we have long argued that some agricultural body in this part of the kingdom should take. They have issued an address to the constituencies, setting forth in striking language some of the evils caused by existing laws relating to land and agriculture, and appealing to voters to use their political power to get these injurious laws repealed or reformed, as each case may require. We trust that this admirable address will be circulated widely amongst English as well as Scotch constituencies, and with a view to extending its circulation we inform our readers that the pamphlet can be obtained of Messrs. Seton and Mackenzie, of Edinburgh, for three-halfpence, post-free. It would be well if it could be read, not only by everyone connected with agriculture, but by every voter in the United Kingdom, and we can promise everyone who sends for it a great deal more than the value of the small sum which it will cost. The injustice and mischief of Hypothec and Distress are very strikingly described, and we venture to affirm that there are few Englishmen who may not learn much that they did not know before about the details of the Scotch law. This portion of the pamphlet may be especially commended to the attention of the members of the English Central Chamber, who have recently passed a half-hearted and worse than useless resolution in relation to the Law of Distress. The Game Laws, the absence of security for tenants' improvements, the Law of Entail, and some peculiar and exceedingly oppressive privileges of Scotch landlords are also dealt with in the address. Next, the evils to landlords, tenants, and

consumers, of such unfair and unwise restrictions upon agricultural progress as the laws referred to are shown to be are forcibly described, and the urgency of removing all such shackles from the cultivators of the soil at this period of serious depression is earnestly pleaded.

But the Directors of the Scottish Chamber have not been content to send out a blank cartridge, as agricultural bodies on this side of the Tweed are accustomed to do. On the contrary, they have well rammed in a very effective charge of shot. That is to say, they have not only shown clearly what is wrong with the condition of agriculture, but they have also pointed out the way by which it may be remedied, and urged farmers and other voters to take advantage of the means so clearly in their power to use. Their advice is so well put that we make no apology for quoting the portion of it which is addressed especially to farmers:—

"What, then, are the Scotch constituencies to do? They have already sent to Parliament representatives pledged to give their votes, and who, in the last division on the subject, have given their votes, for the total abolition of Agricultural Hypothec, in the proportion of thirty-eight against three. And this odious law has been rivetted on Scotland by the apathy or resistance of successive Governments, against this overwhelming preponderance of opinion in the country which the law oppresses. The case is one of flagrant wrong and affront to the Scotch constituencies. It is, therefore, no longer sufficient to pledge Parliamentary candidates to give their individual votes for the abolition of this law. The time has come when they must be required to undertake that they shall withhold support from any Government which shall continue to overbear the voice of the constituencies in this matter, or refuse to deal justly and effectively with other land grievances. If that course be followed with resolution and union, no Government will venture longer to trifle with these urgent questions. The abolition of Agricultural Hypothec should be total and immediate. To postpone its repeal till the end of each lease would deprive the measure of a great part of its beneficial action. It would leave traders in great uncertainty, and the fear of Hypothec would continue to affect the credit of farmers for many years.

"Tenant-farmers have hitherto had plenty of fair promises at the hustings, but no performances in the House. Their interests have been woefully neglected, and themselves treated with indifference as soon as they have polled. The law bristles with rules and provisions specially contrived, in the landlord's fancied interest, to their injury and degradation. Manufacturers and commercial men have, by resolute effort, obtained their release from every law that was detrimental to their industry. Artisans and other workmen, long before they obtained the franchise, effected their deliverance from the laws which hindered their industrial freedom. Let the farmers profit by the lesson, and imitate the example. They have the political power of the counties in their hands. They have only to will their freedom resolutely and it is secure. These are no times for half measures. Let them select men to represent them whose

sympathies are with them, who have their true interests at heart, and who possess an intelligent practical knowledge of their real grievances; and let them vote in solid ranks against every candidate of whose thorough earnestness to redress these grievances they are not fully assured."

This is the kind of political action that is required in England and Scotland alike, and we should rejoice to see some agricultural association formed here to co-operate with the Scottish Chamber. We hope and believe that the action of the Directors will not end with the issuing of their address, but that they will organize a local committee in every agricultural constituency in Scotland to work with them.

## Agricultural Societies.

### ROYAL OF ENGLAND.

Monthly Council, Wednesday, March 5th, 1879. Present—Colonel Kingscote, C.B., M.P., Trustee, in the chair, Earl Cathcart, the Earl of Powis, Lord Chesham, Lord Skelmerdale, Lord Vernon, the Hon. W. Egerton, M.P., Sir W. Erie Welby Gregory, Bart., M.P., Sir Brandreth Gibbs, Mr. Aveling, Mr. Bowly, Mr. Cantrell, Mr. Chandos-Pole-Gell, Mr. Davies, Mr. Druce, Mr. Foster, Mr. Frankish, Mr. Bowen Jones, Mr. Leeds, Mr. McIntosh, Mr. Neville, Mr. Pain, Mr. Rawlence, Mr. Russell, Mr. Sheraton, Mr. Shuttleworth, Mr. Torr, M.P., Lieut.-Colonel Turbervill, Mr. Jabez Turner, Mr. Wells, Mr. Wakefield, Mr. Wilson, Mr. Wise, Professor Simonds, and Dr. Voelcker.

Mr. John Gwynne, of Kenton Grange, The Hyde, N.W., was elected a governor of the society, and a number of new members, whose names will be found on page 258.

#### FINANCES.

Colonel Kingscote (Chairman) presented the report from which it appeared that the Secretary's receipts during the past month had been examined by the Committee, and by Messrs. Quilter, Ball, and Co., the Society's accountants, and found correct. The balance in the hands of the bankers on February 28th was £4,073 11s. 5d.

This report was adopted.

#### JOURNAL.

Mr. CHANDOS POLE-GELL reported that the spring number of the *Journal* was being printed, and would be issued to the members of the Society in the course of the current month. This report was adopted.

#### CHEMICAL.

Mr. WELLS (Chairman) reported that the Committee had considered a case of adulterated manure brought before them by Dr. Voelcker, and had referred the case to the Society's solicitors. Dr. Voelcker had also brought before the Committee the case of some oats (bought from a dealer), which appeared of a bright colour, but which the horses refused to eat. Dr. Voelcker found, on examination, that they had been exposed to sulphur fumes—a process not unfrequently resorted to for the purpose of giving old, stale, or discoloured oats the appearance of being sound and good. During the past year the following reports for publication in the Society's *Journal* had been furnished by the consulting chemist:—(1) On the Influence of Chemical Discoveries on the Progress of Agriculture, (2) Annual Report for 1878, and (3) Report of the Field and Feeding Experiments conducted at

Woburn on behalf of the Royal Agricultural Society of England, during the year 1878. The Committee recommended that the annual grant of £200 for the year ending March 25th, 1879, be paid; and that the new agreement with Dr. Voelcker, as consulting chemist of the Society, to commence on March 25th, 1879, having been approved by the Committee and Dr. Voelcker, be signed and sealed by the Secretary on behalf of the Society. The Committee recommended, on Mr. Christopher's recommendation, the further payment of £250 on account of the new Laboratory, making £800 in all. The Laboratory being in working order, Dr. Voelcker proposed to transfer the Society's work there on the 17th inst. The Committee recommended that the sum of £200 be paid to Dr. Voelcker on account of the fittings of the Laboratory.

This report was adopted, and, on the motion of Mr. WELLS, the Secretary was empowered to sign and seal the agreement with Dr. Voelcker.

#### EDUCATION.

Mr. BOWEN JONES reported that the Duke of Bedford had been elected Chairman for the year. The Senior Examination had been fixed to commence in the second week of April, and the Committee recommended that certain gentlemen be invited to act as examiners. With reference to Mr. Bell's suggestion made at the last general meeting, the Committee recommended that the examination for Junior Scholarships be in future open to students who have passed in the 24th subject (Principles of Agriculture) of the Science and Art Department Examination, subject to the existing conditions applying to the Junior Scholarships. The Committee also recommended that the Science and Art Department be asked to admit, without examination, candidates for the position of Science Teacher in subject 24, who hold the Diploma of the Agricultural College at Cirencester, or the first-class certificate of the Royal Agricultural Society.

Mr. BOWEN JONES added that the "principles of agriculture" is a new subject that has been admitted by the Science and Art Department for examination under the Government arrangements with respect to elementary schools. The teachers receive fees for the candidates who successfully pass the examinations, and there are several grades, honours being given in one class. With regard to the last paragraph in the report, it is, he said, necessary under the rules of the Science and Art Department for teachers to possess a degree of a University in the United Kingdom, the Associateship of the Royal School of Mines, London, or of the Royal College of Science, Ireland, or to pass a certain examination at Saint Kensington, before they are qualified to teach, or, at any rate, to receive fees from the Government for their students who pass the examinations. The Education Committee felt that those gentlemen who pass the senior examination of the Society, or who take the diploma at Cirencester, are eminently more fitted to teach the principles of agriculture than those who, under the existing regulations, are permitted to do so.

The report of the Committee was then adopted.

#### SHOW YARD CONTRACTS.

Mr. JACOB WILSON (Chairman) reported that Mr. Glover's estimate for the supply of hurdles on the French pattern for the pig-pens had been laid before the Committee and accepted. The Committee recommended that a tender for half-hurdle gates be obtained for the sheep pens; that the secretary be instructed to forward a plan of continuous iron fencing to Messrs. Clattons, and obtain their sanction to its being erected after the Exhibition, according to the Society's agreement with them; that Messrs. Eastons and Anderson be requested to lay down water pipes to the Contractor's Yard in the Kilburn show-yard; that a cheque for £1,500 be drawn on account

of show-yard works; that the deduction made from Messrs. Fry and Sons' account for dilapidations to the Society's plant be reduced to £50, the amount which they received from Mr. Penny at the conclusion of his contract. The Committee had approved plans of six ordinary Refreshment Sheds, four Temperance Sheds, the Members' Club, and the Café, subject to minor alterations. The Committee had inquired into the cost of erecting and furnishing a dormitory for the foreign herdsmen, authorised at the last Council Meeting, and ascertained that it would be about £1 per head, including the cost of bedding, mattresses, and blankets.

This report was adopted, after a conversation which resulted in the Council agreeing to restrict the sleeping accommodation for the present year to the foreign herdsmen, and to postpone the question of extending it to British herdsmen.

#### METROPOLITAN EXHIBITION.

Colonel KINGSCOTE (Chairman) reported the recommendations of the Committee with reference to advertising the London Exhibition, the provision of quarantine stations at Brown's Wharf and Portland, and the regulations as to the trial of railway trucks for the conveyance of perishable provisions. It was also reported that Sir John Bennett had agreed to lend a clock for the entrance to the Exhibition, and the Secretary was authorised to arrange for the loan of one for the middle of the yard from some other maker. An offer from Messrs. Merryweather and Sons to supply steam and manual fire-engines for use in the showyard had been accepted. The Committee further recommended that a deputation consisting of members of the Mansion House Committee and of the Council of the Royal Agricultural Society, be appointed to wait on the Ecclesiastical Commissioners, with respect to the formation of a proposed new road at Kilburn; also that the fresh butter entered for exhibition be received at the showyard on Saturday, June 28th, or not later than 9 a.m. on Monday, June 30th; the judging to take place on the latter day. This report was adopted.

#### VETERINARY.

The Hon. W. EGERTON, M.P. (Chairman) reported that the Committee had received the following report from the Royal Veterinary College, including the particulars of an outbreak of disease in a flock of ewes, the property of B. Moss, Esq., Arlington Hall, Essex.

In consequence of a destructive disease having shown itself among lambing-ewes in different parts of the country and several diseased animals having been forwarded to the College, as well as the carcasses of others, a special investigation of the matter was ordered to be made by the Principal, who has received the following report from Professor Ayrton:—

From communications which we have received, it would appear that this affection prevails to a serious extent in several parts of the kingdom, and the mortality cannot be less than 70 to 80 per cent. of the animals attacked, and, in some instances, as much as 30 to 40 per cent. of the entire flock. So far as I have been able to investigate the circumstances relating to the disorder, the following facts have been ascertained. The malady is confined to ewes, and attacks most frequently and severely the aged, and such as are the subjects of debilitating organic affections or constitutional weakness. It prevails especially in flocks whose diet during the winter months has consisted entirely, or nearly so, of grass, or turnips, or which have otherwise been sparingly fed. The Down and mixed Down breeds appear to be the most susceptible, as well as those ewes which bear twin lambs. It usually appears suddenly, about seven to fourteen days prior to parturition, or shortly afterwards; and in those instances in which ewes are pregnant with twins, as many as 80 to 90 per cent. have been attacked.

In those instances in which it follows parturition it proves rapidly fatal.

The duration of the malady varies from twenty-four hours

to three, four, or occasionally seven days, but the shorter periods are the more common. It is non-contagious. The presence of the sick, however, has in some instances appeared to excite abortion in the healthy ewes, and thus occasioned additional loss.

**SYMPTOMS.**—The primary indications of ill-health consist in a separation of the sick from the healthy, a disinclination to feed, and a dull, lowering expression, attended with feeble movements. In this condition the animal continues only for a short time and other and more urgent symptoms quickly develop themselves. The gait now becomes very unsteady, the head is carried near the ground, the ears and eyelids droop, and the general expression is one of extreme prostration, being not unfrequently followed by complete paralysis. The constitutional disturbance is further marked by a considerable rise of internal temperature, the heart's action becomes quick and feeble, and the respirations hurried. Should the disease continue its course, nervous phenomena of a very characteristic type appear. The muscles of one or more of the limbs are feebly jerked towards the trunk. The eyes are fixed, and drawn deeply into their orbits, while at the same time the pupil is directed outwards. The head is either drawn directly backwards and supported in a rigid manner or it is thrown on to the side, where it persistently rests as is seen in cows suffering from parturient apoplexy. The lips are turned upwards, or moved from side to side.

As the malady progresses all these symptoms become aggravated, and the wool readily leaves its follicles. In other cases, where parturition has taken place, symptoms of abdominal pain are manifested, owing to inflammatory infiltration of the uterus. The animal moves round and round, and afterwards throws itself down, and turns its head again and again toward the flank. Pain is evinced on pressing the belly, and likewise in voiding the feces and urine; there is always more or less straining and tumefaction of the vulva, with ejection of a thick, red, and tenacious substance, consisting of blood, mucus, and the debris of foetal membranes. Occasionally, besides the group of symptoms referred to, there is more or less discharge of a mucopurulent character from the eyes and nose, but I am disposed to regard this as accidental, and owing to exposure in the early period of the disease.

**EXAMINATION AFTER DEATH.**—The body is invariably emaciated, although in many instances a fair amount of fat is found in the region of the kidneys. Decomposition sets in early. The cavity of the belly sometimes contains a greater or less quantity of blood-stained fluid. The intestines are pale, and their walls attenuated. The mucous or lining membrane may or may not be reddened, in some instances it is much so, and at the same time swollen and pulpy; but in numerous cases it is free from any pathological alteration whatever. Similar changes to those last referred to are sometimes found in the fourth stomach, but the first, second, and third stomachs seldom show any alteration either in appearance or structure.

The liver is usually small in size, frequently pale in colour, soft in consistence, and granular in character. In some examples it is congested, red, and largely infiltrated with serosity, while in others it exhibits no perceptible alteration. The kidneys are small, soft in consistence, and easily broken down. In some cases they present a more or less congested state, but in other respects they are free from structural change. Only where the urine is retained for a long period, owing to muscular paralysis, is there any perceptible alteration in the bladder. In these instances the mucous layer is congested, thickened, and occasionally infiltrated with blood as the result of a rupture of its vessels.

When parturition has not taken place, the walls of the uterus are generally thin, pale, and flaccid; but they present no perceptible indications of structural change. On the other hand, in those cases in which parturition has been effected, either previously or subsequently to the attack, the uterus exhibits pathological changes of the most varied and destructive character. The outer or serous tunic of the organ is covered more or less with pseudo-membranous layers of fibrine, which in places become united to corresponding portions of other viscera, more commonly to the rumen or panniculus. The uterus is moreover of an intensely red hue and void of its smooth and polished aspect. The walls of the viscera are not contracted. The cavity contains a large quantity of dark red or chocolate-coloured matter, consisting of spoiled blood, mucous, epithelial and inflammatory elements, and the disintegrated

remains of foetal membranes. The mucous membrane is swollen and soaked with sanguineous fluid, or the tissue is ploughed up by blood extravasation. In this condition it is soft, pulpy, and easily broken down. "In such a state of the mucous layer the underlying tissues are always more or less infiltrated with serosity, and opened out in every direction, giving to the organ a thickened and rigid character, and at the same time rendering it soft and lacerable in all its parts. In some instances the vessels are plugged with dark coagula and portions of the organ are in a gangrenous condition. The vaginal passage contains materials of the same nature as that remarked in the uterus, and the structures composing its walls participate to a greater or less extent in the uterine changes.

In nearly all cases the lungs exhibit a more or less congested condition. In some they are also uniformly cedematous; and in others beset with hemorrhagic patches, or points. Pneumonic consolidation is occasionally present, as are also embolic softening and gangrene of smaller or larger areas of pulmonary tissue. The two last-named lesions are usually associated with extensive disease and disorganisation of the uterine walls.

In numerous examples the heart is flaccid, and its tissue soft, but beyond these no changes of note are to be detected. When uterine complications result in blood contamination (septicæmia), blood blotches and petechiæ are invariably found beneath the lining membrane of the left cavities.

In the brain the chief lesions consist of engorgement of the large vessels at the base, general congestion of the coverings, effusion of the nerve tissue, and in some cases serous effusions into the sub-arachnoid spaces.

From a full consideration of all the facts relating to the malady in question, I have arrived at the conclusion that it is due to the debilitating influence of exposure, operating through a long and severe winter, on animals subjected to a defective and illiberal dietary system. This conclusion is based especially on the following observations:—

1. That the older and more weakly ewes are most frequently its victims.

2. That all those animals which are constitutionally weak, or affected with organic disease, whereby the nutritive functions of the body are impaired, are the first to succumb to the malady.

3. That such of the ewes as are pregnant with twin lambs, and on whose system the greatest demand has consequently been made for the materials of the growth and life of the young, are most susceptible to the disease.

4. That the period at which the disorder occurs, viz., seven to fourteen days before parturition, marks the failure on the part of the system to sustain the organic activity which is then required to consummate foetal development and prepare for parturition.

5. That the outbreaks on which this conclusion is based prove that the dietary system was manifestly defective when considered in relation to the trying conditions of the present seasons.

6. That whenever the restorative system of treatment has been adopted the disease has been arrested.

In considering the influence of the present season in regard to this affection, it must be remembered that the mere outward exposure to cold and wet is by no means the only element of mischief. On grass pastures, as well as in the turnip fold, a great thickness of snow has not unfrequently had to be removed before food could be obtained, and in the former case this has necessitated long-continued exertion and a corresponding degree of fatigue. Moreover, every mouthful of food has been charged with an amount of moisture which must have contributed largely to render thin and watery, and otherwise to soil and reduce the nutritive properties of the blood. The malady may be said to belong to that great group of disorders which annually produce such appalling waste in our flocks and herds, and consequently a paucity of home supply of meat. Recognising this, the principles to be studied are clearly those which belong to the art of hygiene. Recent experience has afforded abundant confirmation of this view of the causes of the malady.

The adoption of a strictly restorative system of treatment, involving a liberal and well-regulated diet, together with the administration of ferruginous tonics and saline alteratives, has been singularly effective in arresting the progress of the disease. It is well-known that nothing tends so much to the embarrass-

ment of the constitution, and the production of disease, as the injudicious changes and neglect which are usually permitted in the feeding of sheep; and more especially breeding ewes, which of all others demand the most careful attention. By far the greater number of fatal diseases to which ewes and lambs are liable are of a preventable nature, and their origin is due either to the quantity or quality of food, or to a bad system of management. It too frequently happens that stock ewes are made the scavengers of the farm, and but little regard is paid to their pregnant condition. Turnips that have been eaten off by other sheep, without any additional or more substantial fare are not unfrequently considered by some persons to be quite sufficient to sustain the system of breeding sheep through the trying period of pregnancy, and this altogether regardless of the fact that the maturing of the foetus is being consummated during the coldest and otherwise the most unsalubrious season of the year. Practical experience has shown, again and again, that in ordinary seasons the ewe flock may be sustained through the period of pregnancy, on an exclusive grass or root diet; but while such experience serves to illustrate this fact, it by no means justifies an unqualified adoption of the system. Breed, condition of body, condition and quality of soil, temperature, and other considerations should at all times be taken into account in dealing with the important questions of the food and the health of animals.

The adoption of the principles of treatment contained in the preceding part of this report was speedily attended with benefit; and I am informed that no fresh cases have occurred since my visit, and that the sheep are now much improved in their general health.

With special reference to the outbreak of this disease in a flock of ewes, the property of B. Moss, Esq., Arlington Hall, Essex, it may be stated that the particular flock in question originally consisted of 145 ewes of the mixed Down breeds. They were divided into two lots of 14 and 131 respectively. The former were old ewes, and the latter a mixed lot of various ages. During the winter the larger number were placed on upland pasture, while the smaller had given to them, in addition to grass, a small quantity of dry food.

The disease first appeared on the 1st February in the smaller lot; out of which two have died. On the 13th two of the larger lot developed the disease, and others, to the number of eight, were subsequently attacked, and destroyed in consequence.

J. WORTLEY AXE,  
Professor of Morbid Anatomy at the Royal  
Veterinary College.

#### IMPLEMENT.

Mr. FRANKISH reported that applications from exhibitors for additional space over and above 200 feet of shedding had been considered by the committee, and they had decided that the rules of the Society could not be altered and that any further accommodation required must be taken as open space, which, however, the committee could not guarantee to allot to the extent that might be asked for. This report was adopted.

Mr. JACOB WILSON moved "That a committee consisting of the Stock Prizes and Implement Committees be appointed to recommend judges of stock and implements for the London exhibition; and that the secretary be instructed to invite members of the Society and foreign national agricultural societies in non-prohibited countries to nominate judges to act at the international exhibition this year."

The motion was seconded by Mr. CHANDOS-POLE-GILL, and adopted.

A DEPUTATION from the authorities of Carlisle, consisting of the Mayor (Mr. Thomas Milburn), Sir Wilfrid Lawson, Bart., M.P., Mr. Fergusson, M.P., Mr. S. J. Binning (Deputy-Mayor), Mr. Christopher Stephenson, and the Town Clerk, then had an interview with the Council, in reference to the proposal to hold the Royal Show of 1880 in that city.

In introducing the deputation, the MAYOR stated that if the Council could see their way clear to hold next year's show at Carlisle, so far as the Corporation were concerned

they were quite prepared to pledge themselves to make all the provision required; and he also hoped to be able to show a good subscription list, as was the case when Carlisle sent a similar invitation to the Society in 1876. So far as they had been made acquainted with the requirements of the Society, they had been complied with, the necessary railway accommodation having been provided, and all the land acquired both for the show-ground and trial-ground, and on behalf of the Corporation he was prepared at once to enter into the proposed agreement.

The MAYOR having satisfactorily replied to a number of questions put to him by the Chairman,

Sir WILFRED LAWSON and Mr. BINNING gave expression to the great wish prevalent in the counties of Cumberland and Westmoreland that the Society should visit Carlisle next year, and the desire of the Corporation to offer every needful facility for the gratification of this wish.

The deputation then retired, and on their re-introduction shortly afterwards,

The CHAIRMAN announced, on behalf of the Council, that they had determined to accept the invitation of the authorities of Carlisle, and added his own conviction that every effort would be forthcoming to make the show a success.

The deputation having thanked the Council, then withdrew.

The following letters were received from the Lord President of the Council.

Veterinary Department, Privy Council Office,  
44, Parliament Street, Westminster, S.W.,  
13th February, 1879.

SIR,—I am directed to acknowledge the receipt of your letter of the 5th instant, addressed to the Lord President, submitting a resolution of the Royal Agricultural Society of England, having reference to the importation into this country of cattle from the United States of America, and, in reply, to forward you copy of an order of Council on this subject, passed by the Lords of the Council on the 10th inst.—I am, Sir, your obedient servant, (Signed) C. L. PEEL.

The Chairman of the Council, Royal Agricultural Society of England, 12, Hanover Square, W.

Veterinary Department, Privy Council Office,  
44, Parliament Street, Westminster, S.W.,  
February 14th, 1879.

SIR,—I am directed by the Lord President to acknowledge the receipt of your letter of the 13th instant, and to state, in reply, that if a suitable quarantine station is provided at Portland, the application of your Society shall be taken into consideration by the Privy Council; but I am to add that should a quarantine station at Portland be opposed by the Lords of the Council, such station cannot be confined to animals from any one particular country.

I am further directed to state that, as at present advised, the Lord President proposes to fix the 19th of June as the day on which all animals from scheduled countries (for exhibition) must be in the quarantine station.—I am, Sir, your obedient servant, (Signed) C. L. PEEL.

The Secretary, Royal Agricultural Society of England,  
12, Hanover Street, London, W.

A letter was received from the Foreign Office, conveying a request from the Columbian Department of Agriculture to be placed in communication with the agricultural societies of England, with a view to the exchange of publications and information, and the Council resolved to send that Department the Journals of the Society as published, in exchange for their Reports.

## HIGHLAND AND AGRICULTURAL.

The monthly meeting of the directors of this Society was held on March 5 in their chambers, No. 3, George IV. Bridge, Mr. Gillon in the chair.

The SECRETARY reported that the competition of stallions

for agricultural purposes for the premium of £150 offered by the Society for the best stallion to serve this season in the district of the Perth Show, took place at Perth on the 14th of February, when thirty-eight horses were entered. The judges—Messrs. Gray, Muncraig, Kirkcaldbright; Smith, Stevenson Mains, Haddington; and Wilson, Leithen Hall, Wamphray—awarded the premium to Mr. David Riddell, Blackhall, Paisley, for his stallion Luck's Alb. The district comprises the eastern division of Perthshire, western division of Forfarshire, Fifeshire, and Kinross-shire.

It was resolved that in future all Shorthorn animals exhibited at the Society's annual shows must be entered in the herd book, or the exhibitor must produce a certificate from the Council of the Shorthorn Society that his animal is eligible to be entered therein.

In accordance with a desire strongly urged on the General Show Committee by a deputation from the Scottish Agricultural Engineers' Association, at a meeting held on the 19th of February, the Board resolved to withdraw all premiums and medals for implements and machinery and to open the implement yard at Perth to exhibitors of implements of agriculture, horticulture, and forestry, and other instruments and collections of articles not agricultural, but that there should be no trials or awards of any kind. The deputation consisted of—Mr. Kamp, Stirling, chairman of the Association; Mr. George Greig, of Messrs. John Fowler & Co., Leeds; and Mr. Main, of Messrs. A. & J. Main & Co., Glasgow.

The Board resolved, agreeably with the report by the Committee on General Shows, that the General Meeting at Perth should be held in the yard on the 30th of July, at 1.30, and it was remitted to the Secretary to arrange with the contractor to have a suitable erection attached to the committee-room.

The remit from the general meeting in January last to the directors to consider how members of the Society can be put in possession of the advantages at present given through local associations, with a great guarantee of correctness, was, at the meeting of the board, on the 5th of February, referred to the committee in charge of the chemical department. That committee held at meeting on the 26th of February, when the secretary read a letter from Mr. W. P. Hope, Leith, the mover of the motion at the general meeting, in which he stated that he believed the time had now arrived when the Society would confer a great boon upon its members by providing them with cheap and accurate analyses and reports upon manures and feeding stuffs, as also upon the various soils, and he suggested that this be done by the Society's chemist, the farmers paying the same rate into a fund towards his remuneration as they at present pay to the analytical associations with which they are connected, and that the chemist should be instructed to give valuations when asked for, in accordance with the general price-lists of the day, but not otherwise. Mr. Hope also suggested that a form drawn up from the various price-lists be continually in the hands of the chemist, who could send the same to the farmers as the basis of valuation when required to make the same. The committee reported that, being limited by the resolutions of former general meetings in regard to the expense of analysis, they are no way of furthering the object proposed by Mr. Hope, but they thought it worthy of the consideration of the board whether the chemist should not be authorised to make analysis at rates to be arranged sufficient to pay him; and that on his finding manures or feeding stuffs sold with a guarantee not coinciding therewith, within a certain limit, the name of the seller or manufacturer should be published, if deemed expedient, after the analysis has been submitted to him for explanation as to the discrepancy. The board unanimously approved the suggestion, and remitted back to the committee to make arrangements for carrying it out.

The examinations for the Society's agricultural certificates and diplomas and for the Society's certificates in forestry were fixed for the 31st March, and 1st and 2nd April, candidates being required to lodge intimation, on or before 15th March, with the Secretary, from whom further information may be obtained.

An arrangement having been made with the Royal College of Veterinary Surgeons that the holders of the Society's veterinary certificates are to be admitted members of the Royal College, the Society is to cease holding examinations; but, not to disappoint those students who may have entered the teaching schools with the view of taking the Society's certi-

cates the examination will be continued till April, 1881, in accordance with former rules. The examination for the present year will take place about the middle of April. Candidates' names must be entered before the 31st of March, it being clearly understood that unless fifteen students enter their names no examination will be held.

### ROYAL NORTHERN.

The Spring Show of this Association took place on Feb. 28th, in the Cattle Market, King Street, Aberdeen. The muster of horses was rather above the average in regard to number, and about equal to the average in quality. In the class of draught stallions there were twenty-six entries, one of which did not appear, while six of the others were disqualified from competing in consequence of their owners having failed to produce the required certificate. The choice ultimately lay between Mr. Ewen's Scottish Times, Mr. Harvey's Young Derby, Mr. Reid's Earl of Mar, Mr. Wilson's Victor, and Mr. Adamson's Earl Granville. Finally Mr. Reid's three-year-and-nine-months-old black Earl of Mar, that came third to Victor last year, and was commended at the Highland Society's show, was placed first. He has good middle parts, fair weight, and good quality, but he is plain all over, more particularly about the neck, and lacks masculine character. He was bred by Mr. Walker, Portlethen, got by Young Lorne, and out of Katie, a well known mare. Mr. Wilson's Victor is perhaps the most stylish horse of the lot. He has filled out well since last year, and has good Clydesdale character and quality, but he is a trifle plain about the head and neck, and slightly deficient in the short ribs. He was bred by Mr. Ironside, Cairns, New Deer, and got by Prince of Wales (873). Mr. Ewen's Scottish Times, bred by Mr. Alexander, Colleanord, Banff, and got by Old Times, is a very compact five-year-old bay, with very powerful forearm, but is slightly deficient in the thighs and hind legs. Mr. Harvey's Young Derby is a promising three year and nine months old light bay, with good front, but high and plain hind quarters. In the class for draught stallions under three years old there were fourteen entries. Mr. Blair's first prize horse Prince George of Wales, bred by Mr. Drew, got by the famous Prince of Wales, and out of Jessie Brown, is a handsome black, with excellent bone, fine quality, and of great promise. Mr. McRobbie's Mahomet, which came second, was bred by Mr. Marr, Cairnbrogie, and got by the well known sire Farmer's Glory, and is a heavy bay, with splendidly knit body and good bone and quality, but is too short in the fetlock. Mr. Lawrence's Lord Stanley well deserved the commended ticket. The two first prize horses in the old class have to travel in districts appointed by the association. Mr. Miller's four-year-old bay, Boydstone Boy, was selected by a deputation from the Kincardineshire Farmers' Society, the premium being £50. The show of grain and roots was smaller than usual, but the quality was very good. The display of poultry was also of high merit.

The following is the prize list:—

**HORSES.**—Draught stallions above three years of age—1, B. Reid, Old Auchindoir, Lamsden (Earl of Mar); 2, Geo. Wilson, Whiteside, Alford (Victor); 3, A. Ewen, Whitehills (Scottish Times); 4, C. Harvey, Buckleburn, Culter (Young Derby). Draught stallions under three and above two years of age—1, George Bean, Balquhain Mains (Prince George of Wales); 2, P. McRobbie, Sunnyside, Aberdeen (Mahomet); 3, John Lawrence, Dens, Old Deer (Lord Stanley). For horses best calculated to improve the breed of carriage and saddle horses in the district of the Society—1, W. Morris, V.S., Aberdeen (Messenger); 2, G. L. Thomson, Aberdeen (Lord Beaconsfield); commended, B. C. Urquhart, of Meldrum and Byth.—*Scotsman.*

### SHORTHORN.

A meeting of the Council of this Society was held at the Society's rooms, 12, Hanover Square, W., on Tuesday, the 4th ult. Present: Colonel Kingscote, C.B., M.P. (vice-president), in the chair, Lord Skelmersdale, Mr. H. W. Beaufort, Mr. Edward Bowly, Mr. H. Chandos-Pole-Gell, Mr. S. P. Foster, Mr. J. Harward, Mr. D. McIntosh, Rev. T. Staniforth, and Mr. Jacob Wilson.

The following new members were elected:—Davies, D. Reynolds, Agden Hall, Lymm, Warrington. Grainger, John, Pitscu, Coupar Angus, Forfar. Morton, Mrs. F., Skelsmergh Hall, Kendal. Peter, John, Kingscote, Wotton-under-Edge, Glos. Rowley, John, Stubbs Walden, Pontefract. Strickland, Rev. N. C., Reighton, Brompton, Hull. Sutton, Sir Richard, Bart., Benham Park, Newbury, Berks. Willson, Mrs. M. Raucsey, Sleaford, Lincolnshire.

#### EDITING COMMITTEE.

Colonel KINGSCOTE reported that 4,840 entries had been received for Volume 25 of the Herd Book—viz., 1,710 bulls and 3,130 cows; that the Committee had considered the pedigrees of several animals sent for insertion in the Herd Book, some of which they had accepted, and, before accepting the others, had directed the secretary to make further inquiries.

This report was adopted.

The following letters were read and considered:—

[COPY.]

Shorthorn Society of the United Kingdom of Great Britain and Ireland.

12, Hanover Square, London, W., December 23rd, 1878.

SIR,—In the 24th volume of Coates's Herd Book, which has just been published, there appears the pedigree of a bull called "Michigan Boy," born, calved February 1st, 1876, bred by Mr. J. Fletcher, Rosehaugh, the property of Mr. J. Hay, Little Ythio, got by Royal Hope (32,392), dam Distracted by Whipper in (19,139), &c.

I inclose a complete copy of the pedigree as it is given in the volume referred to.

Since the publication of this volume information has reached the Society to the effect that the pedigree of Michigan Boy, as given, is incorrect, and from inquiries I have made, by direction of the Editing Committee, the Committee have good reason to believe that the pedigree is totally inaccurate.

Mr. J. Hay, I believe, purchased the bull at a sale which took place at Inverness on the 16th March, 1877, where this bull was Lot 10, and was sold under the name of Michigan Lord, the pedigree as then given corresponding with the version of the pedigree given in the Herd Book.

Michigan Boy is stated to be out of a cow called Distracted, by Whipper-in (19,139).

The only cow of this name, by Whipper-in, (19,139) was one bred by the Duke of Richmond; but from information the Committee have received, it appears that this cow was sold to Mr. Bruce, of Burnside, Fochabers, in 1870 in a non-breeding state, and in 1871 went to the butcher, so that it is impossible for her to have had a calf in 1876.

Then, again, it is stated that the sire of Michigan Boy is Royal Hope, (32,932,) a bull in service at Gordon Castle. The Committee also believe to be incorrect, as they are informed that you have never sent cows to Gordon Castle to Royal Hope.

As it further appears that the pedigree, as given in the catalogue of the Inverness sale on the 16th of March, 1877, as furnished by the owners of the cattle offered for sale, and as this bull is stated as coming direct from Rosehaugh, I am instructed by the Editing Committee to ask you, in the interest of the Society and Shorthorn breeders generally, to be so good as to furnish them with an explanation of how the very serious discrepancies in the pedigree, which I have pointed out, have been made.

It is highly desirable for the matter to be thoroughly cleared up, seeing that at present the Committee would feel bound to refuse to accept the pedigrees of any animals got by Michigan Boy.—I am, Sir, yours faithfully,

H. J. HINX, Secretary.

J. Fletcher, Esq., Rosehaugh, Inverness.

[COPY.]

[Post Card.]

Rosehaugh, 4th January, 1879.

DEAR SIR,—Your letter to Mr. Fletcher of Rosehaugh, who is at present absent from the North, will be replied to in a day or two. Yours, &c., J. H.

[COPY.]

Rosehaugh Mans, Avoch, 6th January, 1879.

H. J. Hine, Esq., Secretary, Shorthorn Society,  
12, Hanover Square, London, W.

SIR.—In Mr. Fletcher's absence from the North, your letter of the 23rd ultimo has been handed to me to reply to, and I may here state that he could give no explanation of the circumstances to which you refer, for he never interferes with me in my management of the Home Farm. I regret extremely the errors and mistakes which occur in the pedigrees given in for Michigan Lout, but, as I was ignorant of the manner in which the pedigrees are made up, and did not attach enough importance to the numbers given for the animals, the discrepancies arose entirely through ignorance and a want of care, and not from any wish to make up a pedigree. I cannot give any further explanation than that I took down the pedigrees of the families to which the bull belonged, both on the sire's and dam's sides, and unfortunately took down the numbers by mistake, when I should have left them blank, as I am now informed.

Regretting the trouble I have given in connection with the matter, and apologising for the error,

I am, Sir, your obedient servant,

p.p. FRANCIS LAWSON, J. H.

[COPY.]

Shorthorn Society of the United Kingdom of Great Britain  
and Ireland, 12, Hanover Square, London, W.

Feb. 17, 1879.

*Private.*

J. Fletcher, Esq., Rosehaugh, Inverness.

*Michigan Boy.*

SIR.—On the 23rd of December last I wrote you a letter on this matter, addressed as above, of which letter I enclose you a copy.

On the 8th of January last I received a post-card, of which I enclose you a copy.

On the 8th of January last I received a letter, of which I enclose you a copy. You will observe that it is signed, "p.p. Francis Lawson. J. H."

I am instructed by the Editing Committee to call your attention to the contents of this last letter, and particularly to the fact that Mr. Lawson says that you never interfere with him in the management of the Home Farm, and to the former fact that the letter which contains this statement is not even guaranteed by Mr. Lawson's own signature, but is signed by procuration of Mr. Lawson, by a writer who does not give his name.

I am instructed to add the following remarks:—

*First.* They do not wish to deal finally with this matter without giving you an opportunity of making your own personal explanation, and have therefore written you again on the subject.

*Next.* They reserve the right to publish the correspondence.

They hope you will agree with them, that the terms and tenor of the letter of the 6th January are quite unsuitable to the serious nature of the transaction, and that you will take appropriate steps to convey to Mr. Lawson your sense of the transaction, and to prevent any such conduct in future.

I am, sir, yours, faithfully,

H. J. HINE, Secretary.

[COPY.]

Woolton Hall, Liverpool, February 23rd, 1879.

H. J. Hine, Esq.,

Secretary, the Shorthorn Society, London.

*Michigan Boy.*

SIR.—I am in receipt of your registered letter of the 17th inst., and marked "private," forwarded to me from Rosehaugh, and containing copies of letters regarding a bull called Michigan Boy, sold by Mr. Francis Lawson, manager of the Home Farm of Rosehaugh, to Mr. J. Hay, and I confirm what Mr. Lawson states in his letter of 6th January, that I have hitherto allowed him to manage the farm, without any interference on my part, and I was very much annoyed when the question of the pedigree of the bull was brought to my notice; although from the explanation he then gave me, I most certainly believe the discrepancies and errors were from carelessness, and not with the object of giving a wrong pedigree. I have, both verbally and in writing to him, expressed

my regret at his want of care; and that nothing of the kind must again occur. I have also written to-day, to advise me, why the letter of 6th January was not signed by him; and if you will kindly let me know in what way "the terms and tenor of the letter are quite unsuitable to the serious nature of the transaction" can be amended, I shall write to him on the subject. I may mention that I am only for about six months of the year in Scotland, and I beg again to express my regret at what has occurred; but I did not even know that a pedigree had been given with the bull.

I am, sir, yours faithfully,

JAMES FLETCHER, of Rosehaugh.

Resolved;—"That the entry of the pedigree of the bull Michigan Boy in the Herd Book, Volume 24, page 180, be cancelled; and that the entry of any animals got by, or affected by, Michigan Boy, be refused."

## GENERAL PURPOSES COMMITTEE.

Mr. H. W. BRAUFORD reported that the accounts for the month of February had been examined by Messrs. Quilter, Ball, and Co. and the Committee, and were found to be correct, that the Secretary's petty cash account had been examined and passed, and showed an expenditure of £9 16s. 8d. during the past month; that the receipts for the same period had been £577 3s. 6d., the balance of the Society's current account at the bankers being £1,021 1s. 7d., and that the Committee recommended that cheques be drawn for various accounts and salaries amounting to £192 1s. 8d.

That the Committee recommended that a further sum of £500 be invested in the Three per cent. Consols, and that the Secretary be directed to take the necessary steps thereto.

This report was adopted.

The next meeting of the Council was fixed for Tuesday April 1st, at 3 30 p.m.

## BRITISH DAIRY FARMERS.

A special meeting of the Committee was held recently, to amend the list of candidates for the Council, Mr. E. C. Tisdall presiding.

The Hon. Sec. (Mr. H. S. HOLMES PHELPS) reported that he had received letters from Messrs. Walter Gibbey, J. J. Mechi, and J. Glover, requesting that their names may be removed from the list, as they would be unable to give their services.

The CHAIRMAN then moved that Mr. Robert Leeds, of Keswick, Norwich, whose name had been accidentally omitted on the last occasion, and Mr. Andrew Rintoul, of Pembury, near Tunbridge Wells, should be selected to fill up two of the vacancies; Mr. Stapleton proposed Mr. Albert Alexander, of Stepney, and Mr. Dale proposed Captain Frazer, of Holloway, for the third vacancy. On being put to the meeting, Messrs. Leeds, Rintoul, and Alexander were elected. The original list with these alterations was then formally moved and carried. It was decided that voting papers should be printed at once, and, with a copy of the list of fifty-four names, forwarded to each member of the Association as soon as possible, with a request that the same be returned by Saturday, March 8th. Monday evening, the 10th was fixed for the examination of the voting papers by the scrutineers, up to which time votes would be received. Messrs. E. C. Tisdall, R. Dale, and the Hon. Secretary were appointed scrutineers. Estimates for printing the journal of the Association were submitted, and it was resolved that the contract of Messrs. Squire, Dale, and Co., of 7, Barleigh Street, Strand, be accepted, theirs being the lowest estimate.

It was reported that the outstanding sums of money due to the Association, according to the balance sheet of December 11, had been received, with the exception of the £18 owed by the late hon. sec. (Mr. H. F. Moore). It was resolved that Mr. Moore be communicated with again on the subject, and that, if necessary, legal steps be taken to obtain payment of the amount.

## ENGLISH CART-HORSE.

The usual monthly meeting of the Council of the



Society was held in a room of the Society of Arts, Adelphi, on Tuesday, the Earl of Ellesmere (President) in the chair.

Several gentlemen were duly elected members of the Society.

The Council then proceeded to consider the resolutions of the Editing Committee as to eligibility for entries in Stud Book.

"1. In the first volume of the Stud Book the only condition is, that the pedigree of the horse to be entered shall be satisfactory to the Committee.

"2. In any subsequent editions it will be an essential qualification that the Committee are satisfied that horses possess purity of blood on both sides for at least two generations."

N.B.—By purity of blood it is intended that no Cleveland or Suffolk cross is eligible.

A conversation took place on the foregoing resolutions, in the course of which the Hon. E. COKE, as chairman of the Editing Committee, explained that the Committee had passed these resolutions subject to the decision of the Council; and they now deemed it prudent that the Council should instruct the Committee as to future entries in the Stud Book. Mr GILBERT thought it should be distinctly stated in the Stud Book the particular cart-horse, the county descended from, whether Lincolnshire, Derbyshire, or Cambridge. This would have the effect of pointing to the strain as well as to the purity of breed. The President was of opinion the resolutions should be dropped, and another substituted that would define the course to be taken in entering horses in the Stud Book. Captain Heaton thought if the resolutions were accepted, it would have the effect of admitting horses in the first volume, and refusing their stock in succeeding volumes. Ultimately a resolution was proposed by Captain HEATON and seconded by Hon E. COKE—

"That the resolutions of the Editing Committee now before the Council be dropped."

This was carried by a majority of 10 to 2.

Mr. R. REYNOLDS then moved—

"That it be an instruction to the Editing Committee that no horse be admitted into the Stud Book having a cross of any other breed than that of the English Cart-Horse for at least two generations."

Mr. F. STREET seconded the resolution, which was carried unanimously, it being generally understood that any horse of this breed would be eligible to be entered in the Stud Book, unless a cross was proved.

Mr. F. STREET said that as they had now 2,000 entries it was time to close the list, and he therefore proposed—

"That the entries for the first volume of the Stud Book close on the 30th April next, and that this intimation be advertised."

This was seconded by Capt. Heaton, and unanimously agreed to, with the hope that every one interested in improving the breed of the English Cart Horse would send particulars of their stallion to the secretary at once.

Mr. F. STREET said that he had intended to move "The desirability of holding a Stallion Show in the Agricultural Hall, in the Spring of 1880." He had since learned, however, that a show was to be held at Birmingham this month, and felt inclined to defer considering this matter till next meeting of Council. He therefore withdrew the motion in his name.

The SECRETARY (Mr. G. M. Sexton) read a letter from the Duke of Manchester, who is a member of the Council, to the effect that his Grace was unable to act.

It was decided to fill up the vacancy at the next meeting of Council.

Mr. F. STREET said that it was now nearly twelve months since the Society was formed. He had therefore great pleasure in proposing—

"That the first annual general meeting of the members of the English Cart-Horse Society be held on the first Tuesday in May, and that this be intimated to the members by circular; time and place to be decided at next Council meeting."

Mr. R. REYNOLDS seconded this resolution, which was adopted *nem. con.*

The SECRETARY read minutes of the Finance Committee, which stated that Major Dashwood had been elected a member of that Committee. He also reported that the Committee recommended that a public accountant should audit the books and accounts of the Society, at an annual fee.

Mr. GILBERT, as chairman of the Finance Committee, formally moved—

"That an accountant be appointed to audit the books and accounts of the Society; that a balance sheet be prepared for presentation to the members at the general meeting; and that Mr. James Harris, of Old Jewry Chambers, be appointed auditor."

Major DASHWOOD seconded the motion, which was adopted.

## Farmers' Clubs.

### CENTRAL.

The second meeting of the Farmers' Club for the present year took place at the Inns of Court Hotel, Holborn, on Monday evening, March 3, under the presidency of the Chairman for the year, Mr. Pickering Phipps, M.P. The subject for discussion was "The Present Aspect and Future Prospects of our Home Agriculture;" Mr. W. Scotson, of Aigbarth, Liverpool, being the introducer.

The CHAIRMAN having briefly introduced Mr. Scotson to the meeting, that gentleman read the following paper on "The Present Aspect and Future Prospects of our Home Agriculture."

Mr. Chairman.—When I wrote to our secretary, Mr. Druece, suggesting the subject put down for me to introduce to the members of this Club, I had no idea I should be selected to undertake that important duty. It is an act of courtesy on the part of the committee to the person who imagines he has hit upon a proper subject for discussion which I fully appreciate, but I am not so sure of the wisdom of the proceeding as I am sensible of the compliment intended.

However, as the committee have been considerate enough to select the subject I named, and request me to introduce it, I take this opportunity of thanking them, and doubt not that the members will, after they have heard my short and imperfect remarks, discuss the question much better than I am able to do. Having said this much by way of introduction, I will commence what I have to say on the "Present Aspect of our Home Agriculture and its Future Prospects."

First of all let me remark that I have little to say on our present land laws, or whether the State ought to buy up the vested interests in land, as I have heard advocated, and hold it in trust for the benefit of the nation at large—as it does the post and postal telegraph business—or be owned by large or small landowners, or the law of primogeniture, for although these laws have played a very important part in the past and in the present condition of our home agriculture, they have also been the means of our increasing population flying from the country to where houses could be built, coupled with the higher rate of wages and facility of transit afforded by railways, and so caused the English towns to swell enormously.

When I was a schoolboy my school books informed me the population of England and Wales was 12,000,000. I presume it is now about double that number, notwithstanding all who have emigrated to America and elsewhere. Nearly the whole of this increase has taken place, as I have said, in the English towns, whilst some of our agricultural parishes in the hands of large landowners, even in Lancashire, have actually diminished in population in the same period. Results such as these have their causes, not the least of which is the monopoly in land. There are, besides these, land laws, landlords, lawyers, clergymen, or the Church, and last, though not least, land agents, who are concerned in representing and sustaining the owners' side of this great question of agriculture; and who hold in their grip what I call the raw material—the land. Compare for one moment the value now to what it probably was 300 years ago, and the enormous difference must be apparent, although our island has not increased in size.

And let us inquire what has done most to raise the agricultural land owners' fee simple so much in value?

I am here speaking of the value of agricultural land. Now what is the value of uncultivated land, even here, in thickly populated England, charged according to what its yield is

per annum? We cannot go into a county of England but we may find plenty of cultivatable uncultivated land, side by side with the cultivated, paying no rent (or if it does, only a game rent); no taxes, for you know all taxes on land are fixed by rent and paid by tenant, so the higher a farm is rented the heavier it is taxed, which looks like fining a person for paying too much rent. I have sometimes thought there would be more justice in fining the owner of the uncultivated plot for its idleness in this country of short food, and let the fee be so heavy that he would be compelled to cultivate it or forfeit it to the State. I will here quote a few extracts from Mr. Caird's article on British agriculture, which will show clearer than anything I can say how the ownership and the occupying cultivators' money and interests are so blended together that they are like partners in one concern.

Mr. Caird says, the capital value of the property of the landowners—independent of minerals, is 2,000 millions, yielding an annual rent of 87 millions. He then goes on to say that the tenant farmers are entitled to be reckoned as part owners of agricultural property, for in crops, live and dead stock, they own equal to one-fifth of the whole capital value of the land, or in other words, 400,000,000, and as cultivators they employ and possess individually a larger capital than the peasant proprietors of other countries in their double capacity as owners and cultivators. Then he adds, the great bulk of the land is cultivated by tenant occupiers. There are 561,000 in Great Britain and 600,000 in Ireland. He goes on to tell how the potato famine in Ireland in 1846 was as disastrous to the owner as to the tenant, causing the Encumbered Estates Act to be passed to sell off the lands of those proprietors whose encumbrances had overwhelmed them, and substitute others more capable of fulfilling the duties of landlords, so that in a few years after this Act was passed land was sold in Ireland to the value of £25,000,000, and in order to secure the landowners' prompt attention in future to the condition of the people, the incidence of the poor rates which had previously been placed wholly on the tenant owner was divided equally between him and the land-owners.

I have just one other remark to make which I have taken from Mr. Caird, as bearing directly upon the question of labour, and scarcely less directly upon the question of rent. Mr. Caird says the general condition of the agricultural labourer was probably never better than it is at present. Compared with that of 300 years ago, in the time of Elizabeth, wages have risen sixfold, while the price of bread has only doubled.

Two centuries later, in 1770, the farm labourer's wages were 1s. 2d. a day, when the price of wheat was 46s. a quarter; in 1846 1s. 7d., when wheat was 53s. At the present time wages have risen 60 per cent., while wheat has not increased in price, or, in other words, the labourer's earning power in procuring the staff of life cost him five days' work to pay for a bushel of wheat in 1770, four days in 1840, and two and a half days in 1870.

I have quoted Mr. Caird to show that the capital value of land may be fixed at too high a figure. For instance, suppose some Mr. Caird had been writing on the value of agricultural land in Ireland in 1844 before the potato famine, and then again in 1848, two years after the potato famine. His comparisons would have looked something like the affairs of the Glasgow Bank. Mr. Caird shows in his description of the ruined tenants of Ireland in 1846, that when the cultivating power of this class is stopped, or checked, it is as disastrous to the owner as to the tenant. Therefore let it be understood that this one-fifth of capital belonging to the occupier in and upon the land in the shape of live and dead stock, backed by the persevering intelligence of the farmer, has done more to develop the resources of our agriculture than anything done by the owners. I will further say that it is these men who wield this working power and money, who have done something to bring out such scientific men as Mr. J. B. Lawes, Dr. Volckner, Mr. Mechi, and a host of stock and sheep-breeders. There was an opening or need for such men, and they have risen up. I must not forget the implement manufacturers; first, for one moment, look back thirty or forty years, when the bulk of the corn was cut by the sickle and thrashed by the flail. Before our great agricultural implement manufacturing firms were known, the village blacksmith did nearly all the work.

Let me bring you back to the present time, and contrast the steam thrashing and dressing machine with the old flail, and in like manner the reaping and mowing machine, not forgetting the self-blinder, with the sickle and the scythe; and the same contrast will hold good with every implement on the farm. Well, gentlemen, it is the far-seeing, practical agriculturists, who have in their business behind these necessities, and these scientific mechanists have picked up their ideas and put them in such form and substance as could be seen by all who visited the Royal showyard at Bristol, in July, 1878. Picture to yourselves those long lines of sheds, and that mighty collection of implements and animals, and I venture to think you will say with me that the agriculturists and landowners of Britain are greatly benefited and indebted to those persevering and noble-minded men who have made such results possible. It is this combination that has made our home agriculture what it is; it is from this source that barren wastes are converted into waving fields of corn, and the landscape dotted with sheep and cattle, and the people dwell in peace and plenty, besides giving money, pleasure, and power to the sleeping partner—the owner—in the concern. And it is quite as easy to undervalue this working power as to overvalue the other, because without this working power the land would be almost valueless, and become a waste. Well, gentlemen, in looking at the present aspect of our home agriculture, or in other words the great manufacturing interest of growing food for the people, because cotton in its raw state is no more cloth or a shirt than land is bread and butter, and cheese, and beef and mutton, without the aid of the manufacturing element—I say nothing of wool and skins, though these are products of agriculture, though secondary—food is, or ought to be, a much more important element of production than raiment. Therefore, sir, with your permission, I will call this agriculture of ours the manufactory of food, just as the Mint is the manufactory of coin, and it is from a food-producing point I wish to treat this subject. Looking from my standpoint, I see no other interest in the manufacturing community of this nation that is so heavily weighted as this food manufacturing interest. The first that looms in my mind is the landowner, who seems to have various interests in his land—political, social, religious, and game—all of which could be shown by no very ingenious intellect to be more against the food-producing powers of the land than otherwise. Then there is the cash interest of the owner—the yearly rent—and as the owning power takes no practical management in the food-producing power on a farm, I have called the owner the sleeping partner in the affair.

Again, the owning power has always appeared to want and select tenants who will pay their rent, and not over-crop or sell too much produce of the farm. There have been endless covenants inserted in farm agreements all of which tend to restrict cultivation and cropping; and so much is this the case that I once said to a land agent, I did not know one tenant farmer who dare farm his owner's land as he would do were the land his own, let the terms of his agreement be ever so liberal, and I here repeat that opinion.

These restrictive covenants are a great mistake, and have arisen from a belief that over-production means deterioration of soil. This is a mistake and a fallacy which a fuller knowledge of cultivation and its proceeds ought to have scattered to the winds long ago; and it has been the cause of thousands of tons of foreign produce being imported which ought to have been grown at home.

Next upon my list comes the unfair incidence of local taxation. I maintain that local taxes are levied upon agricultural land as they are levied upon no other manufacturing concern in the kingdom. Not only are the farmer's house and buildings assessed for local taxes, but his raw material, the land, is also assessed, which is a monstrous injustice. Why should not the raw material of all other manufacturing concerns be assessed, or the land relieved from paying local taxes? The farmer's house, buildings, and machinery should only be assessed as other manufactories are treated. I have only this to say of the property and income tax, that it is the best attempt I know of in practice to catch evenly all who are able to pay. The same cannot be said of tithes, which are wholly levied upon land. I question whether any other industry would for a moment tolerate this glaring impost, and I say this as a Churchman.

Add to these drawbacks the insecurity of yearly tenancies, under which the greater part of the land is held, and in many

districts the want of cottage accommodation for farm labour, and insufficient compensating clauses for unexhausted improvements. There is also the knotty question of game, which is a source of constant annoyance to the mind of the good farmer where it is in abundance. I will give you one instance which came under my observation. I was called upon, with another gentleman, to value game damages on the crop of barley of one farm, the rent of which was a little over £400. The tenant had taken the precaution to wire off patches in the different plots, to show the difference between the protected parts and the unprotected. My co-valuer was appointed by the owner, and was a land agent in the neighbourhood of the farm; the damages allowed the tenant was £100. You may draw your own inference as to the anxiety, annoyance, and the annually-recurring loss occasioned by the over-preservation of game. I have one word to say about untoward seasons. Before the days of foreign competition a bad season raised the price of farm produce, but now the immense influx of foreign production completely upsets all calculations on this head, so that we may even have lower prices after a bad season than after a good one. Such are some of the aspects of home agriculture as presented to my mind, and I will take leave of this part of my subject with the assurance that some of the members present will show the farmer his best course in these difficult times.

And now a word as to the future prospect of our home agriculture. We may accept it as an encouraging sign that rents will in justice be lowered when we see so many landlords returning 10, 20, and 25 per cent. to their tenants. But this question of rent is a matter of agreement between owner and occupier, and, like labour, must be in a great measure regulated by supply and demand.

We have the Central Chamber of Agriculture, with its kindred branches, including the Local Taxation Committee, where grievances can be discussed and remedies suggested, all of which tend to bring about a better state of things. There is also the Agricultural Holdings Act of recent date, which almost everybody agrees is a dead letter—although the discussions that took place at the time the Act was passed did a good deal to enlighten landlords and tenants as well as legislators and the public as to the way in which land was let, and how improving tenants were too often unfairly treated on quitting their farms.

I have said this much of the Agricultural Holdings Act with the view to call the attention of this Club to the subject, and would ask—Do you think the agriculture of this country ought to have nothing but this dead letter Act to guide its interests—interests which are among the most important and vital of this or any nation? I feel that the improving tenants of England are entitled to something more than this dead letter Act, if they are to have justice done them on quitting their farms. I have often thought that Messrs. Cobden and Bright, when engaged in the battle of cheap bread, directed all their energies to open our ports to the foreigner, and overlooked and ignored the development of our home resources. I am of opinion that the landowners of that day were equally short-sighted in advocating the cause of protection. Had they shown the same zeal to relieve their tenants from restrictive covenants, and given freedom to cultivators and security for the capital invested in and upon the land, they would have taken the best and surest means of meeting the foreigner. We may make up our minds, from what we see on every hand, that foreign competition is destined to increase even more rapidly in the future than it has in the past.

I am confirmed in this view by a perusal of statistics kindly furnished to me by Mr. Dyke, agent to the Canadian Government, which show the total number of live stock imported from the United States and Canada—into the United Kingdom—for the year 1878 was as follows:—Cattle, 86,589; sheep, 84,076; pigs, 17,933; against 19,187 cattle, 83,395 sheep, and 810 pigs in 1877. I say nothing of the importation of dead meat, grain, &c., all of which are on the increase. And how are these altered circumstances to be met? Landlords ought in justice to lower their rents, abolish restrictive covenants, preserve less game, give security of tenure and compensation for unexhausted improvements, and encourage by every other means a more liberal outlay on the land.

With all these inducements to good and high farming on the part of the owner, the tenant would enter upon his occupation with a confidence, energy, and enterprise unknown

before; he would be stimulated to cultivate the land in the best possible way, and grow the maximum quantity of the best quality of all home agricultural productions. The resources of the soil would be developed to their fullest extent; high and profitable farming become the rule and not the exception, and the English farmer would have a chance to cope more successfully with his foreign competitors than he has at present. We must all realise the fact that England is but a part, though an important one, of the British Empire, with its vast Colonial possessions and their boundless resources, and looking at the prospects of the British farmer, there can be no doubt that emigration, with all the facilities of intercommunication we possess, must exercise an influence on home agriculture.

Mr. H. J. LITTLE (Goldham Hall, Elm, Wisbeach) said he made no apology for being the first to rise, because although he had been a member of that Club for many years, he had not very often obtruded his opinions upon it. It had been sometimes objected to papers read at that Club that they were too exhaustive; but he did not think that fault could be found with Mr. Scotson's paper, seeing that it left plenty of room for any gentleman who wished to take part in the discussion of that important question. As regarded the distress that now prevailed among agriculturists, he supposed no one in that room doubted that farmers were passing through such a period of trial as had not been known for a great number of years in British agriculture; yet, if men took their ideas solely from the daily papers they would know very little indeed about the distress which prevailed among farmers, and with the exception of a few weak walls in the agricultural papers there was very little in the public press to call attention to the magnitude of the disaster which had overtaken the farming world. The *Times* had recently published several letters on the subject, but he thought they would agree with him that generally speaking they were not much to the point. A little while ago, however, there was a letter from a Mr. Bromhead, a gentleman living in Huntingdonshire, who remarked that he began as an agriculturist five and thirty years ago, with the intention of making the land his bank, in accordance with a maxim of the late Sir Robert Peel in reference to that matter, but that he had been rudely awakened from his illusion by the recent unfavourable seasons. As for himself he was bound to say that if he had not had a better bank than the land lately he would have found himself in a very awkward position, as not only had the land not yielded him any interest for his deposits but he had some apprehensions as to the safety of the principal. A noble Marquis, who was the chairman of a great agricultural society in this country, took upon himself to prove from Mr. Bromhead's figures that farmers were, after all, in a very good position (Laughter). He (Mr. Little) was glad to say that they had got a more practical man in their own chairman. The Marquis of Huntly tried to show that Mr. Bromhead must have made a good deal of money, but he, unfortunately, could only do so by the assumption that that gentleman had the entire gross acreage of his farm under corn-cropping during the whole period of thirty-five years—a conclusion which he need hardly tell that meeting was not exactly justified (Laughter). Another gentleman had called the attention of the public to the present state of agriculture, in a more practical manner—Mr. Bear, a gentleman who was well-known in that Club, and who, if present would, he hoped, take part in that discussion—wrote an article in the *Fortnightly Review* in which he took a very correct view of the gravity of the present situation of farmers (Cheers). He would not attempt to follow Mr. Bear in his examination of the causes of the present state of things, and he scarcely agreed with him entirely as to the sufficiency of the remedies which he suggested, but he felt sure that succeeding speakers would enter into those questions. The first question which struck him in connection with the paper, was whether the present depression were temporary or permanent, and in reference to that he wished just to glance back at some of the causes, and afterwards to notice some of the remedies which had been proposed. The first cause was, he thought, beyond doubt, the series of bad seasons, an evil which was a national calamity, and still more a calamity to farmers throughout the country. The next cause was the deterioration of labour, a deterioration not to be measured by the increased amount which farmers paid. Not only was labour more expensive, but it was also of inferior quality, and hence farms were rapidly getting into a worse state than they used to be (Hear, hear). Again, he could

not help thinking that a great deal of the present distress had arisen from the wars, and rumours of wars, that had existed of late in Europe. He felt confident, that the mere idea of England's going to war with Russia last year and the year before, had done a great deal of harm to agriculture in this country. The fact of wheat being for a week or two as high as 70s. a quarter in the spring of 1877, was a calamity to the British farmers, inasmuch as it gave a great stimulus to agriculture in America, the result of which was that Great Britain had been swamped with corn from that country ever since. Whether the immense importations from that part of the world were likely to continue, he was, of course, unable to say. A week or two ago a letter appeared in the *Times*, which stated that the production of wheat in America averaged only about 11 bushels an acre; yet in ordinary seasons, even with crops which seemed to English farmers so ridiculously small, the exporters could send far more wheat to this country than it required. The writer of that letter said that he was well acquainted with American agriculture, and taking this to be correct he (Mr. Little) had made a calculation that a quarter of wheat could be produced in America and landed on the shores of Great Britain for an average cost of about 37s. There was another letter in the *Times* of that day from a gentleman who he had hoped would attend that meeting (Mr. Scott), and who estimated, he thought, that at the present time there was a loss on exports of American wheat of not less than 4s. per acre. If, however, the American farmers could grow wheat for England at such prices as had lately ruled here, the cultivation of wheat in this country must be doomed, and with that loss would go one of the great mainstays of British agriculture. They would, no doubt, be told by some that the only remedy for this state of things was the restoration of protection. Well, that was a cry in which for the present British farmers had not taken part; it was so far almost confined to British manufacturers and traders. Many farmers present were perhaps brought up as it were in the principles of Protection; he himself was reared in a family in which the name of Free Trade was like the name of some black monster; but having seen the working of free trade for the last 30 years, he could not presume to think that the people of this country would ever again agree that their food should be taxed. Let them just consider the position of the matter. Only 10 years ago the imports of provisions from America amounted in value to but £25,000,000 annually; in the last year the value was £100,000,000 (Hear, hear). Thus they saw of what immense importance was the food supply from America and how unlikely it was that the people of England should suffer any very great check to such an enormous trade. At the same time they could not shut their eyes to the fact of the great danger that there was in this country depending to such an extent upon imports of corn from abroad. If those two great countries—America and Russia—were to stretch out their hands across the Pacific and agree to starve England out, it would not be many months before this nation would be placed in a greater difficulty than she had ever been placed in hitherto. Such a stoppage of food supplies would cause a famine in a very short time far more certainly than any European war in which our country could ever be engaged. Therefore there was very great danger in their being dependent to such an enormous extent upon imports from abroad. But to return to farmers' present difficulties. Perhaps the most immediate and powerful remedy for the present state of things was to be found in a lowering of rents. He knew that that was a subject which presented a great many difficulties (Hear, hear). He knew that there were in that room many gentlemen who represented landlords, and that a great many members of the Club owned land, and therefore to some extent occupied the position of landlords. He wished, therefore to avoid saying anything on that occasion which might offend any one present; but he must say that he quite agreed with the writer of the paper that rents must come down very considerably, and within a short time. But would they come down soon enough for the bulk of the agriculturists of this country? That was the great question. He was rather inclined to think that they would not, and that they could not, for this reason, that farmers would hang on to the land as long as they possibly could, and that as long as landlords could get the present rents they would be quite ready to take them without saying anything at all to their tenants about the matter (laughter). A gentleman with whom he was acquainted recently left a large farm in extraordinary fine condition, and

within a short time there were so many applicants for it that the rent was put up, the owner being one of the largest landowners in England. The applicants from the district in which the farm was situated refused to give the extremely high rent demanded, but very soon there made their appearance some wise men from Gotham, and one who came from that neighbourhood agreed to pay the additional rent, saying, that the land was in such fine condition that 10s. per acre of rent did not matter, as it was worth all the money to "farm out." (Laughter.) But there were many persons who did not see their way clearly to "farming out" as that gentleman intended to do; and he dare say that if that great landlord to whom he had alluded should get a few thousand acres thrown upon his hands (as he was very likely to do after they had been "farmed out") he would be able to resuscitate those paper mills which existed not far from his estate, which depended for their existence on the supply of "twitich," and which had now been closed some years by lack of that material. (Laughter.) As regarded what was said about land not paying sufficient interest as an investment he maintained that that cry was, generally speaking, a fictitious one. The amount of interest which land yielded had really very little to do with the value. In this great commercial country there were always many persons who were anxious to get possession of land, even if it paid only 1½ per cent. There were a number of rich people who wanted land chiefly on account of the influence which the possession of it conferred. The other day a pamphlet was put forth by a gentleman in Norfolk, Mr. Houghton, in which he expressed or quoted the opinion that a reduction of 20 per cent. in rents would amount to a revolution in the country. He (Mr. Little) maintained that such a notion was ridiculous. He would suppose that a gentleman in that room, was the owner of 1,000 acres of land, for which he received £1,500 a year. A reduction of 20 per cent. would be a loss of £300 a year, which would, in most cases, not be a matter absolutely ruinous. But let him consider seriously the position of the tenant of that 1,000 acres, whether with one-fourth the capital embarked in it which the owner possessed, £300 a year had anything to do with his losses for several years past. It was, in fact, nonsense to suppose that a diminution of 20 or even 25 per cent. would produce anything like a revolution. People had said that farmers were in a panic. He did not believe anything of the kind. He did not believe the British farmer ever got into a panic, most of them being, perhaps, rather too much inclined to boldness. It was, however, a very different thing for soldiers in battle anxiously to look over their shoulders to see where their succours were coming from, than to fling away their arms in a panic. What they wanted was to see where their succours were to come from. He did not dread the importation of meat as much as some persons feared it. That had, no doubt, caused great anxiety, but he did not think they had as much cause to fear that as they had to fear some other things. They all knew that freights were now so low for anything that had to cross the Atlantic that meat could be carried at almost a nominal rate; but with the revival of the trade of this country he believed we should see a more satisfactory demand for English meat. Well, they must all hope for better times. Such a run of ill seasons (for instance) as they had lately experienced must surely come to an end. He could only say in conclusion in the words of one of the greatest writers of the present day—"Nature repairs her ravages; repairs them with sunshine and human labour. Nature repairs her ravages, but not all. The uprooted trees are not rooted again, and if there is a new growth it is not the old trees." Yes, nature repaired her ravages. After the fiercest storm came sunshine; but he much feared the sunshine would little avail those farmers, who, like the trees, had been uprooted by the blast! There might be a new growth, but the old trees would be gone. He did venture to appeal—not obsequiously, but earnestly—in the name of the tenant farmers of England, to landlords and to those members of the club who represented landlords, to stretch out a helping hand at once to their tenants, feeling certain that every delay would revert in the long run on their own trade, and that they themselves would suffer in the end in proportion to their present obstinacy and tenacity.

Mr. BOWICK (Bedford) said that Washington had once said that agriculture was the most ancient, the most noble, and the most useful occupation of man. If he had lived until to-day he might have added, and the most depressed also. A farmer who occupied some 700 acres of poor clay soil said to

him the previous week that he had lost more money during the last four years than he had made during the previous twenty. In fact, those last four years seemed like the lean and ill-favoured kine that came out of the river and ate up the fat and well-fed kine. He could not help thinking the Committee of the Club had exercised a wise discretion in bringing up this subject for discussion, as it was a matter of vital interest to the tenant farmer at such a time of depression as the present. There were two causes among others for this depression. If they had four years' rainfall in three years they must look out for bad seasons. And they had had it. If they had in the months of May, June, and July an excess rainfall of 600 tons to the acre, they were bound to have bad barley crops and other crops in proportion. If they had a fall of only two degrees of mean temperature during the growing season the result was bad wheat and other bad crops. These things were beyond their management however, and were in the hands of a higher power. But as he was speaking on this interesting subject he might as well say here that he had been requested by the Council of the Meteorological Society to convey to the meeting their desire that the farmers of England would show more interest in this matter. He did not believe they would ever be able to foretell exactly what weather was coming, but the day would come when Meteorology would be of great value and of great scientific interest to agriculturists. They had noticed that bad seasons went in cycles, and now that they had so many bad seasons they might reasonably anticipate good seasons in returning cycles. Another point on which the present aspect of the depression very much depended had been strikingly presented to him on one market day at Luton last month by Mr. Clark, a very intelligent farmer, who, when speaking to him took out of his pocket a piece of paper, saying that was what over-weighted the farmer. It was a demand for local rates. (Hear, hear.) He ventured to think that every farmer occupying 500 acres of land had to pay for every working day in the year 10s. of local and imperial taxation before he had anything for himself. These were not the conditions under which the farmers expected some years ago to hold their land. He had nothing to say about the incidence of taxation, but unless something were done to relieve the farmer in this respect it would be impossible for him to go on. As long as they were paying £3 per head, man, woman, and child for local and imperial taxes—so long agriculture and trade were likely to prove unprofitable. What they wanted was proper representation in Parliament. While the fighting interest had 260 members in the House of Commons, the agricultural, commercial and trading interests had not half that number, and the numbers who represented the farming interest could be counted on the fingers of one hand. Why was this? It was not because farmers had not amongst them men who were likely to prove capable legislators. He believed there were farmers in that room who would grace any legislative assembly. He hoped the time was at hand when they would have a Minister of Agriculture, and he believed they would all agree with him that a better man could not be found for that responsible position than the honourable member for South Norfolk, (Hear, hear,) and that such Minister would not be a mere hang-on of the Board of Trade. A former speaker alluded to the small average of grain crops obtained in the United States, and a very small average it was. He believed that next to English farmers the Dutchmen obtained the highest average of wheat crops, and he could not help thinking that if they in England paid as much attention in the improvement of seed as to stock and implements, a good result would ensue. A good strain always paid in seed as well as in other things. He did not want to talk "shop," but he thought they might take a lesson from those heavy-smoking Dutchmen, who were so careful in the selection of their seed. They liked to see it growing as well as in the sack, and he had sent some who came to him as much as 200 miles to see the growing stocks. Another thing was the proposal that agriculturists should adopt the co-operative principle. Now, with co-operation he had no fault to find, and every man had a right to adopt it if so disposed. But those who proposed it should go a little further, and ask whether the landlords might not find it more profitable to cooperate, and by having one large farm instead of seven small ones pocket the money now made by the occupiers. Or the corn dealers might lay their heads together and get their corn a little cheaper. He asked them whether it would

not be better to let things be regulated by the rules of supply and demand. He deprecated the conduct of those who sought to pull down the characters of persons engaged in trade in connection with agriculture, and he had never known anyone to get on by trying to pull down his neighbour. That was a very poor alternative (Question, question). They might if they liked to make only one great shop in Oxford-street and Holborn, and who would gain? He believed in the principle of live and let live. He was reminded by those proposals of an illustration given by an American writer on political economy. A farmer who was not very thriving went to his servant and told him he could not keep him on. But the servant said if he kept him on he would not ask for wages, but would take a pair of oxen instead. (Hear). The farmer said, "But if I give you the oxen in a few years you will have all my stock, and what shall I do then?" to which the servant replied, "Ah, you can become my servant and work to get them back again." He believed that no good would be done by trying to injure any one class, as they were so interlaced one with another that what injured one injured all.

Mr. HENRY CLARK (Edgcombe, Tavistock) said he rose with some diffidence, because it was said on a previous occasion by Mr. Treadwell that many men spoke who knew nothing about the subject, and he did not wish to be classed as one of them, or to inflict on his hearers unprofitable remarks. They had heard from the lecturer of the relative positions of landlord and tenant, but this was a thing which had been the subject of constant discussion for the last fifty years, and had been placed before them in every possible light. He had been told that day that the one great evil under which they laboured was want of security for unexhausted improvements. This matter had been brought before them time after time, but what had they done to remedy it. He would venture to say nothing. The first thing which he remembered was Mr. Pusey's Bill, and since then the matter had been discussed over and over again, until the Agricultural Holdings Act, introduced in the most admirable manner by the Duke of Richmond, and supported at first by almost every member of the Legislature. This seemed likely to remedy what was undoubtedly unjust—that the tenant had no security for his capital invested in the land. But amendments were quickly introduced, and we had compulsory speeches and permissive measures. And what was the result—the Act was condemned throughout the country, and had remained in fact a dead letter. But what was the remedy proposed. They were told to ask for a reduction of rent, but that was a matter between landlord and tenant, and he would tell them so boldly. He came from the West of England, where he had acquired some knowledge of agricultural matters, and the other day at the Devon and Cornwall Chamber of Agriculture he had introduced the question of farm tenancies for discussion. But a farmer had put it to him in this way. He said, "If I go to my landlord and ask him for a reduction of rent, he will say to me you are a good fellow and a good farmer, but I can get equally good fellows who are equally good farmers who will be glad to take your land at the present rate." Further there was this difficulty, that a great proportion of the farms were held on lease with seven or ten or fifteen years to run. How were they to get out of it? There were binding covenants in the lease which could only be cancelled by mutual agreement. In the yearly tenancies, of course, the tenant could give up his land, but that could not be done where there was a lease. Those who held leases had a great deal of capital invested in the soil, and if they gave them up some one else would slip in and take their place and benefit by it. What the farmers wanted was unity of action, so that when a farmer left if he did not receive compensation for unexhausted improvements, they would treat anyone who rented the farm as a black sheep, and say to him we will not have anything to do with you. (Why that is trade unionism, and that won't do). How then were they to meet the difficulty (advise not in that way), or to have a reduction of rent where there was a lease with seven or ten years to run unless by mutual agreement. (Hear, hear.) One gentleman had spoken of good seasons and bad seasons. He did not think this had much to do with the matter; they would always have bad and good seasons. What they had to look to was the enormous importation from abroad. Live stock was being imported very largely, and he was glad to see it, for as a farmer in his neighbourhood had said to him when he wanted to get store stock

in the West of England they did not know where to get them. They had to pay 55s. per cent. for store stock, and how could they stock the farms at this price? Agricultural depression was great, but the way in which it should be met was by obtaining for the tenant compulsory security for his capital, and the sooner he had it the better. Mr. Bear had written two admirable articles in the *Fortnightly Review*, in which he had exhausted the whole question. A story had been told about farming out, but whether he had a lease or yearly tenancy no man was justified in farming out. They did not want to farm out but to keep their land; and if they could get good terms from their landlords it would enable them to occupy the land until better times. That was the position the tenant should be placed in, and must be placed in. They had seen, no doubt, that Mr. Samuelson had given notice that he was going to call attention to the working of the Agricultural Holdings Act, and to the condition of agriculture in England. He was, no doubt, a Liberal member, but he saw the depression of agriculture, and so men knew better what was the present state of things. He was to move for a committee of inquiry on the Agricultural Holdings Act, and he hoped that their excellent chairman, Mr. Phipps, who took so great an interest in all agricultural matters, and who had proposed to insert a compulsory clause when the Act was before the House, would support the resolution. But in order to strengthen Mr. Samuelson's hand he hoped the Farmers' Club would do something. They had done a great deal in the way of talking about this question, but talking alone would have very little effect, and they should now take action. He proposed that they should pass a resolution, viz., "That in consideration of the prevalence and severity of agricultural depression in this country, Parliament is earnestly requested to consent to the appointment of Mr. Samuelson's proposed committee to inquire into the operation of the Agricultural Holdings Act, and the condition of agricultural tenancies in England." He would submit it for their approval and if they passed it they would strengthen the hands of Mr. Samuelson, and show the House that he was backed by the Farmers' Club of England. He trusted some one would second it, and that it would be carried. Mr. Clark concluded with moving a resolution, which was seconded by Mr. Bear. The Chairman, however, ruled that the resolution could not be put.

Mr. H. NEILD said he believed it was not usual in that Club to pass resolutions; he had never known it to be done except in the case of the Agricultural Holdings Act. He sympathized in the object of the mover of the resolution just proposed, but it could not be put without the previous introduction of a new rule, for which purpose it would be necessary to give notice.

The CHAIRMAN, interrupting, reminded Mr. Neild that the resolution had not been seconded.

Mr. W. E. BEAR said he would second it.

The CHAIRMAN said that being the case he must now express his opinion as the Chairman, that the resolution was irregular and out of order, and that it could not be put to the meeting (Hear, hear).

Mr. H. NEILD (The Grange, Worsley, Manchester) proceeded to say that it was quite clear that what might be called the agricultural question had come to a crisis; and he thought the crucial question for the British farmer in his present position was whether he was any longer to be injured by covenants which impeded him in his operations, and was to be left without valid security for unexhausted improvements. In their present position they could not possibly compete with foreign importations from all parts of the world. Lord Chat-ham said that English soldiers could accomplish anything but impossibilities, and he (Mr. Neild) would say on behalf of British farmers that they could accomplish anything but impossibilities, and that as they were at present situated their competing with foreign imports was impossible. When Sir Robert Peel passed free trade, it was assumed that farmers would be left unfettered in their calling, but, in point of fact, grievous shackles had been imposed upon them as regarded their own produce and their cultivation; and, after 30 years' experience in farming, he did not hesitate to say that the great question which they must put in the front was that of freedom, combined with a curity in farming. That question had, in fact, become a national one. It was now 81 years since that question was first introduced in Parliament by one of the greatest and most distinguished agricultural authorities of that day, the late Mr. Philip Pusey, who, addressing the landlords of England, said, "The subject of unex-

hausted improvements seems to me the most important of all agricultural questions, and the improvement of our agreements in this respect to be a condition *sine qua non* of any improvement of the soil or its cultivation." Their excellent friend who had read the paper—one of the best papers that he had recently heard in the Club—told them that when he was a schoolboy, the population of England and Wales was about 12,000,000. It was now over 30,000,000. Owing to want of security for the capital of the tenant there could not be a proportionate increase in home production. The difference had to be made up by importations from abroad, and he contended that unless proper security were given to British farmers it was not likely that they would make the necessary improvements. He now found that this country was now actually importing £115,000,000 worth of foreign corn per annum. The present system was operating very injuriously towards British husbandry. English capital and English labourers driving abroad to do better. To produce provisions is what they wanted, and which were sold against them at home. Reference had been made to the recent bad seasons. The great Husbandman of the earth had promised that there should always be seed time and harvest, and they had never failed yet, and he (Mr. Neild) believed that the vicissitudes of the seasons had but little to do with the main question before them. There were, indeed, the greatest difficulties connected with the present state of trade; trade and manufactures had been carried on in a speculative manner; credit had been abused, and farmers were to some extent amenable to that law by which—the innocent suffered for the sins of the guilty. That had something to do with the question before them. He estimated that the labourers received about 30 per cent. more money than they did a few years ago, and did about 15 per cent. less work, making together a difference of about 45 per cent. There had been a great increase in rents during the last ten or twelve years, and agriculture had been to some extent inflated by a false value being given to land. Speaking of his own district, he could testify that the advance in the price of labour and in the advance of rents had produced very serious results.

Mr. TREADWELL (Upper Winchendon, Aylesbury) said that they would have to pay attention principally to three things—to rent, to labour, and to tradesmen. They had no alternative but to submit to the prices they got for their produce, and no legislation would alter that. But they could ask their labourers, their landlords and their tradesmen, to assist them at a time like this, and they could all very well afford to do it. People were living now at a much cheaper rate than they had been doing for years. If they asked the landlords to reduce the rent they could well ask the labourers to consent to receive reduced wages, and the tradesmen to make some reduction in their prices. Those were the three elements to which they must look for a reduction of expenditure, and it was in this character a change must be effected if farming was to be made profitable. With the present price of produce, the cost of production eat up all the profit, and he could not, were such a state of things to continue, go on with his farming except at a loss. He did not complain so much of the badness of the seasons, for his crops had been good, but he had a difficulty in paying his way because his produce had brought in barely sufficient money to pay expenses. In some localities rates and taxes had no doubt increased, but in his district, thanks to the present Government, they had decreased, and he had no doubt it was the same with many other farmers, and, under the circumstances, he did not see how the Government could help them. Mr. Clark said the question of rent was one between landlord and tenant, and it was the same with the agreements (No, no.) It was just as much a question between landlord and tenants on what terms the land should be let as to what price it should be let. (No, no.) That had always been his opinion, and it was his opinion now.

Mr. J. WALKER (Mattersea Hall, Bantrey) said he quite agreed with his brother farmers that the producers of this country had no grudge against the consumers. As regarded free trade what he objected to was that they had only had a half-and-half bastard free trade. Thirty-three years ago, being a delegate in London, he assisted in urging upon the Government of the day what he believed to be the sound view of that question. He maintained that the only proper taxes were taxes on completely manufactured articles, a fairly adjusted income tax, and all produce being left free, for all were consumers, but all were not producers; therefore, taxes

should fall on producers as consumers, and not on producers alone. Had that principle been adopted the malt tax would have been abolished; but vested interests stood in the way of such a change, and hence nothing was done.

Mr. C. S. READ, M.P., said: Sir, I can hardly agree with my friend, Mr. Treadwell, when he says that the Agricultural Holdings Act is at best to be a dead letter, and that compensation for unexhausted improvements is a question between landlord and tenant (Hear, hear). I say that this question has become a national one now, and it is a national disgrace that a large portion of the land of England should be held by tenants on the conditions that it is now (Hear, hear). Is it, or is not, true that in the year 1879 half the land of England is held on a six months' notice to quit without any provision for compensation to the out going tenant either by agreement or by custom. I believe that this is really the case, and it is a very wrong state of things. I think that under any circumstances it would be a national disgrace that such an evil should be inflicted on agriculture, but it is especially disgraceful at the present time. Neither, Sir, can I concur in the concluding remark of my friend, Mr. Neild, that the recent disastrous seasons have nothing to do with the subject we are discussing. I think that is one of the chief things to be considered. We know perfectly well that we have passed through four most disastrous agricultural seasons, and if we had grown anything like the average quantity of corn we should not have been in so difficult a financial position. I do hope and believe that good seasons will return again, and that a cycle such as we have passed through during the last four years will not be repeated. My friend, Mr. Little, said in effect that there must be a universal reduction of rent. I think he said there must be a reduction of 20 per cent. Well, that is a very nice proposition indeed. It is very easy to make such a calculation, but the reduction is not very easily got (Hear, hear). I don't really know that I should say that the reduction ought to be universal. I believe that a great deal of the land of this country is over-rented, but I also believe that a great deal of it is moderately rented—rented quite on the "live and let live" principle. I believe that a great deal of the land of this country will not easily find tenants—I mean the very light land and very heavy clay land. If I were a tenant in distress I should not be so much disposed to ask the landlord for a permanent reduction of rent as to ask him to assist me in other ways. Let him provide me with better buildings; let him drain my farm if necessary; let him make the necessary improvements of a permanent character; let him get rid of the hedgerows; let him give me bigger fields, so that I could employ a steam cultivator, let him preserve me from the ravages of game, especially ground game, let him protect me against those disastrous pests which I am happy to say have been very much reduced in my neighbourhood and, I believe, throughout the kingdom; and I believe that improvements of that kind would do more to benefit me than even a considerable reduction of rent. We have now to contend against difficulties that did not present themselves formerly, and I believe that assistance is to be found chiefly in permanent improvements in the land we occupy. There appears to be a deep conviction in the minds of some persons that the only remedy for the present distress is to be found in peasant proprietorship. Not merely has that been said in the House of Commons, but I have heard the idea frequently put forward in private and seen it expressed in newspapers, and I believe it prevails very generally. Now, I contend that this distress points rather to the necessity of landlords making permanent improvements in their property, and I think that is what we have to look to and not to the creation of a lot of peasant proprietors. I, for my part, contend that the long-established division of landlord, tenant, and labourer is the best that can exist in a country like this (Hear, hear)—a country which is very rich, but at the same time of very limited extent. That brings me to the point raised by the introducer of this discussion in opposition to very large estates. I think that as farmers, and also as forming part of the public, we should ask ourselves this question in relation to large and small estates: Are the large estates better farmed than, or as well farmed as small ones? I should say they are better farmed. Do they produce a larger quantity of food? I think they do. The question of the size of estates is one, with which we need not trouble ourselves. Simplify the transfer of land, make the acquisition of it more

cheap and easy than it is, if you like. Although it may not be desirable to attempt to secure a reform of the land law at present, I agree with those who say, "Give the owners of land more power over the land than they have at present." The Agricultural Holdings Act has given the holders of settled estates the power of charging their successors with part of the cost of making permanent improvements, and that is a great boon. I could not exactly comprehend what the introducers of the subject meant by saying that there is a great deal too much uncultivated land in this country. I feel that there is too much cultivated land. I know parts of the county of Norfolk which have been broken up from sheep walks, and I think it would have been much better if a large portion of that land had not been broken up, and that the same remark is applicable to a great deal of land in the same district which was formerly in the condition of warrens. There is a large quantity of land now under cultivation in Norfolk which it would be a great deal better to have in grass. Mr. Scotton also made a great point about tithes being a burden to proprietors. Well, I think the way in which the tithe average is struck is most unfair. The reader of the paper also seemed to think that the occupiers of all land should be allowed to deal with the farm more as they would do if it were their own. I believe that in many cases a farmer may safely spend the same amount of capital as if the land belonged to him. Under Lord Leicester's recent leases each tenant may farm exactly as he likes for the first sixteen out of twenty years, and a great deal may be extracted from the land in such a period. Mr. Clark said that gentlemen engaged in agriculture in the West of England want store stock. If that be so, why in the name of goodness don't they breed store stock? (Hear, hear.) We in the east cannot breed a large amount of cattle because we have so little grass land, but surely farmers in the West of England can provide themselves with plenty of home-bred store stock and need not be dependent on the introduction of such stock from America or any other part of the world. No one has said anything to-day about the law of distress; yet that is a matter which seriously affects farmers as a body. Some time ago I met with a case in which the rent was allowed to get six years in arrear, and was not pressed for until some one who was not the tenant had put a number of sheep on the farm to consume the turnips. (Laughter.) No doubt that was sharp practice, and in my opinion the law requires to be altered.

Mr. BEAR (Surrey) said Mr. Neild told them what they wanted, and then told them how not to get it by not passing the resolution. What would be thought of their talking so much if they refused to support a resolution on the subject of the agricultural distress that existed? Mr. Samuelson's motion was to be seconded by the chairman of the club, and supported by one of the most respected members of the club. But when they proposed to pass a resolution at that meeting in support of it they were asked not to proceed with it. Was not the depression in agriculture more important than precedent? On a previous occasion they passed a resolution in favour of making the Agricultural Holdings Act compulsory, and the compulsion was certainly even more necessary now when agricultural distress was so great. But although they acknowledged the necessity, they refused to act. There was no use in giving homilies to landlords. They had been trying that for the last fifty years without effect. They had to tell Parliament that the laws were unfair, and they should support a member of Parliament like Mr. Samuelson, who came forward to ask for an inquiry into them. He hoped gentlemen would not stand in the way of the resolutions. By passing it they would strengthen Mr. Samuelson's hands; by neglecting it they would weaken them.

Mr. H. TRETHEWY (Salisbury, Amptill) said as regards the first part of the question, namely, "the present aspect of our home agriculture," he would remark that not merely agriculture, but every interest in the country was depressed at the present time; and the question arose whether or not the present state of agriculture might not be in some measure attributable to the general depression of the country. It was quite obvious that farmers had suffered from the bad seasons which had lately come upon agriculture, but at the same time there could be no question that what weighed most heavily upon them was the low price of produce (Hear, hear). In some parts of the country crops had been pretty good during the past season. In some districts the barley crop had realised



from 45s. to 50s. a quarter; in others, barley was not worth perhaps more than about 25s. a quarter, and with such a price for barley, and with wheat at about 40s., production could not be remunerative. The position of agriculture resembles that of other industries. There was not, he believed, at that moment, a single interest in the country which could be said to be in a flourishing state, and if that was the case, how could they expect agriculture to be otherwise than depressed? Although agriculture and trade might be to some extent different, yet they were also in a considerable degree united, because if money were not being earned by the people, they could not spend. Ever since he first knew anything about farming—and he had had something like 40 years' experience of it—there would always be cycles of depression and prosperity. They were now under a cloud of depression. How they were to get out of it he did not know, but he had faith in the elasticity of the country, and he believed that they would get out of it, and that prosperity would return. Something had been said with reference to the levying and the amount of the tithes. He believed that the Tithe Commutation Act—he well remembered the passing of it—was one of the best measures ever proposed for agriculture. Unless that Act had been passed the improvements that had taken place since would have met with the greatest obstruction. Let them just fancy every article of produce obtained by farming, by whatever means it was produced, being liable to have one tenth of it taken in kind. If a farmer or occupier had succeeded in gaining a very large crop, a tenth of that crop would have disappeared; not only the natural production of the soil, but the improved skill of the farmer would have been taxed to that extent. The Tithe Commutation Act put an end to that, and established a principle which had conducted very much to the advance of agriculture. With reference to the remarks about small owners and occupiers, he thought Mr. Head had put the question very fairly. He (Mr. Trethway) could speak from experience as to small occupiers. He had no hesitation whatever in saying that if the land of this country was to be farmed properly it must be farmed by large occupiers. He happened to know instances in which small peasant occupiers had tried farming, and it was a most egregious failure (Hear, hear). He entered into that question in a paper he read before the Club about fourteen or fifteen years ago. As regarded restrictive covenants, he did certainly think that part of the subject deserved to be well considered by owners and their agents, and he thought that concessions might be made with advantage to both parties, and without any risk of injury to the land. He concluded by remarking that as the meeting now commenced at four o'clock and had to be closed at six, it was desirable that all the speeches should be limited as regarded the time they occupied.

Mr. DRUCE observed that there had been a limit that afternoon, the time allowed being a quarter of an hour.

Mr. T. W. MORRIS (Bedgrave, Aylesbury), agreed with preceding speakers that landlords should be asked to reduce rents, and proper security be afforded for the capital invested by the tenant in the soil. At present, while local burdens were being increased, too many landlords looked on placidly, not caring what their tenants suffered.

Mr. WM. BOYER (Cottesbrooke, Northampton), observed that tithe was really a landlord's payment, and that since the passing of the Tithe Commutation Act, making it a rent-charge on the land in lieu of tithe, it would have been much better if in all cases it had been paid by the landlord. In most cases the tenant has, by an agreement with his landlord, paid the amount of the rent-charge to the clergyman, but if he had not done so he must have paid it in the shape of rent to his landlord, so that it was not a tenants' question at all. On the estate for which he was agent, he in several lordships paid the rent-charge to the clergyman himself, and he believed that many of the tenants did not even know that any tithe was paid on the land they occupied. He considered that it would be better if instead of its being a fluctuating rent-charge it was now made a fixed one at the amount it was originally commuted at, and that it would be better if in all cases the landlord were to charge his tenant the full value of the land, and pay the rent-charge to the clergyman himself.

Mr. H. TRETHWAY said he quite agreed with the last speaker. He thought it was the interest of a landlord to get his land made tithe-free. A tithe owner could only

claim for two years, and if the land were tithe-free, the landlord might feel secure that the tithe-charge was paid in the rent, whereas in the absence of that protection for the landlord, the tenant might go away, leaving the landlord to pay the two years.

Capt. DELF (Walton-on-the-Naze, Essex) deprecated the meeting's separating without adopting some resolution like that which had been suggested. He thought that in such a matter they should strike at once. Mr. Samuelson was a man who was very much respected, and who occupied a very independent position in the House of Commons, and in the present depressed condition it would be a great pity if they lost that opportunity of supporting him by means of a definite resolution. The time had gone by when they should allow the bow-string or like grip of strangulation which had been exercised so long to cripple the energies of the farmer. They must emancipate him, and not leave him to be the political drone that he had been in the past. (Cheers.) He would appeal to the Chairman to reconsider the question whether it was not competent to him to put the resolution to the meeting.

Mr. H. CHEFFINS (Easton Manor, Dunmow) said, as a very old member of the Club, he strongly deprecated any resolution being submitted to the meeting without previous notice. (Hear, hear.) He had been a member of the Club from the very beginning, and he well recollected that over and over again the question whether or not resolutions should be proposed had been discussed and decided in the negative.

The CHAIRMAN remarked that he had already decided that the resolution could not be put, adding that there was, of course, no reason why it should not be passed after the business of the meeting was concluded. (Hear, hear.)

Mr. J. WOOD (Oakley Manor, Hurstpierpoint, Sussex) said the question whether resolutions should be passed had been canvassed over and over again, and it was felt that in the interest of the Club it was not desirable; the practice would hardly be found to work well when resolutions were passed. He thought that in the case of exception, instead of passing a resolution in favour of the compulsory clause of the Agricultural Holdings Bill, they passed one in opposition to it. Those meetings were held, not for the adoption of resolutions, but for the ventilation of questions affecting agriculturists by means of discussion.

The CHAIRMAN said, after his ruling, there could be no discussion of the question.

Mr. SCOTSON then replied: Referring to the remarks of Mr. Treadwell, what I mean by high farming is good farming, which I believe to be the most profitable. Noticing what fell from Mr. C. S. Read, M.P., I wish it were known that the agricultural or landed interests pay the whole of the tithes, and all other productive interests have the same or equal privileges without paying tithes. This is most unfair. Whether right or wrong, this is my opinion. I have no desire to be hard upon either large or small landlords, but no one can doubt that cottages for labourers should be convenient for the work on the farm, and each holding should have sufficient accommodation for its labourers, which is not generally the case. As judicious and efficient labour is the foundation of wealth and the erection of more houses on most large estates, would be advantageous to tenant and labourer.

On the motion of Mr. J. BROWN (Elwyn Orchard, March), seconded by Mr. E. SMYTHIES, thanks were voted to Mr. Scotson for his paper, after which, on the proposal of Mr. Caldecott, a vote of thanks was given to the chairman.

On the Chairman leaving the chair, Mr. Clark put his resolution to the meeting, and it was passed by a large majority, only five or six hands being held up against it.

It is stated that at the annual sale of yearling Short-horns held at Wick on February 28th, prices were about the same as last year, with a dull demand. Those belonging to Mr. Henderson, of Bilbster, averaged about 28 guineas, the highest price being 35 guineas. The highest prices realized by Mr. Adam, of Lynegar, was 30 guineas, while the average was 23 guineas. Mr. Brown of Watten, made an average of 23 guineas, the top being 27 guineas.



## BIRMINGHAM SHORTHORN SHOW AND SALE.

To those who are accustomed to regard actual, corporal, visible, and tangible merit, as qualities which are desirable to transmit, the show of Shorthorn pure-bred cattle, at Bingley Hall, on the 5th ult., must have been very disappointing. Of visible merit there was very little; and whilst the pedigrees were undeniable, the quality of the animals, as a rule, was not a credit to any breed of cattle, whether its pretensions be great or small. The bull calves under twelve months old, for example, contained but a very few animals which presented an appearance which would place them beyond the level of an ordinary lot of Irish calves in the Bristol market; and many of them might easily be overlooked in such company. The pedigrees were, in some instances, almost faultless, but the calves showed nothing for their blue blood—not even under the auctioneer's hammer. They did not appear to be appreciated by ordinary stock-breeders who have to study utility rather than fashion. It may be rank heresy to say that the great bulk, not only of these calves, but of all the bulls in the yard, would only make third or fourth rate steers if castrated, but that is the simple truth. And until Shorthorn breeders can show something worth calling a good animal on its own merits as the rule instead of the exception, they must be told that the occult science which claims for bad and indifferent animals a value in proportion to the arbitrary and purely fanciful "purity" of their blood, is passing rapidly out of that period of its existence when belief in it took the form of *S. & d.*

It would not be fair to the Birmingham Agricultural Exhibition Society to presume that this annual show and sale was merely an outlet for culls from breeders' herds; nor would it be fair to breeders to presume that the animals entered in their names were average specimens of what they have at home. Yet the fact remains that when animals of note were recognised in the crowd they seldom bore marks of judge's favour, nor did they realise prices under the hammer which were at all in keeping with their reputation. In fact, if the fanciers and fashion-mongers cannot keep the ball rolling amongst them it will not be moved by outsiders. And the day is nearer than many care to admit when all that is purely fanciful and unreal in connection with Shorthorn values will cease to influence those who use the animals for practical purposes. When that time comes, all artificial hindrances to the improvement and protection of the breed will cease to exist, and its real worth will be appreciated by the many, whilst the few will have lost a mania which has done no real good, and may do much harm.

The bull calves, already mentioned, were 121 in number. Mr. C. Hobbs obtained the first prize with Tredegar, a fairly good and promising calf, with good coat, a good hide, good thighs, deep quarter, and very level and telling all over. This calf won at Tredegar Show and at the Swindon and North Wilts Meeting. The second prize winner was Gregory, the property of Rev. H. Beckwith; and the third prize fell to Mr. S. C. Pilgrim's Quickestep, a very useful calf with plenty of hair and a good frame, which looked like a bullock breeder. Mr. Pilgrim's Maximilian too was of the right sort and a very nice handler. Some of the fashionably bred ones with "approved" pedigrees were amongst the plainest, and some wretched calves were amongst the best, but Mr. S. Fox's Darlington Duke 2nd, by 24th Duke of Airdrie, had the making of a good bull about him, and could boast more good qualities outside his pedigree than many of his Bingley Hall companions.

The class for bulls exceeding twelve and not exceeding

fifteen months old, contained 75 entries, amongst which were some very bad ones. But the first prize winner in this class, Mr. W. G. Garne's Sir Sydney Newport, took the extra prize as the best young bull in the show. He has a remarkably telling head and his quality is undeniable; his hide is very soft and mellow and his coat perfection. But he is flabby, and not likely to be so useful to the ordinary stock breeder as the third prize animal which stood next him, Admiral Hornby, bred and exhibited by Mr. J. G. Altwater. This bull is full of firm flesh, is well ribbed, has a good back and fairly good bull's hide, but his hair is rather hard and he has not the style or character of the other. The second prize bull in this class, Julius, bred and exhibited by Col. Lloyd Lindsay, was an animal of considerable merit, and undeniably useful, but has not the quality of Mr. Garne's bull. To judge of this class and the next older one, it would appear that the worst failings of the Shorthorn breed, namely, narrow chines, badly sprung ribs, and hollowness behind the shoulders are being intensified rather than remedied by the breeders of the present day; for the bulls at Bingley Hall which were good through the heart might have been counted on one's fingers.

There were 58 entries in the class for bulls exceeding fifteen and not exceeding twenty months, Lord Beauchamp taking both first and second prizes with stylish animals but not of the first water. The first prize bull, Cranmore, was by Marquis of Blandford 2nd, own brother to Rev. Kennard's Queen Mary, but Cranmore has nothing of Queen Mary's character about him; the second prize animal was Robin Adair, by the same sire, a rather finer and more stylish bull but not quite so well formed perhaps, and their coats though thick are rather harsh. Mr. H. I. Sheldon's Duke of Charmingland, is a big youngster, but has no form about him. Some of the entries were exceedingly plain.

Bulls exceeding twenty and not exceeding thirty months old numbered 23 entries, and were headed by Mr. E. T. Pear's Arius, a bull of nice quality by Pearl Diver, but he is not perfection, and Col. Lloyd Lindsay's Don Carlos, the winner of the second prize, is a very plain animal; so is Mr. Altwater's Duke of Charmingland 8th, and the pure Bates Duchess bull Wild Boy of the Hills, by 4th Duke of Clarence, is ugly all over—scarcely a good point to be found in him—and with all his breeding Mr. Lythall had great difficulty to get 63 guineas for him. There were 7 bulls exceeding thirty months, Mr. W. G. Garne's Skylark, taking precedence to the Rev. Bruce Kennard's Marquis of Blandford 4th, though the style, character, and quality of the two animals will scarcely bear comparison. Mr. G. Fox's Baron Australia Bates, is not much to look at, and Scotland Yet, by Earl of March, has merits, but not many.

The class for bulls exceeding ten and not exceeding twenty months old, for which a prize of £50 was offered, contained eighteen entries, the conditions being that a reserve price of 50 guineas, instead of twenty guineas, might be placed on the animal in the sale. Here the award fell to Messrs. Horsley's Snow King, a long, level, and tolerably well-ribbed white bull, with an effeminate head and light forehead. Mr. J. Elwell's Baines Windsor 2nd was placed second, and although he looks well out, has good hair, a good hide, but not quite so mellow as it might be, good thighs and fairly good quarters, he is light in front, narrow in the chine and nothing through the heart. Lord Morton's third prize year-old bull is one of the right sort, and worth a lot more than some of "his betters." The Rev. Bruce Kennard's Prince Victor, winner of the first prize at Oxford and the second prize at Bristol was thrown out altogether. He is not in as good form as he was then,

and has not fulfilled all the promise he made, but for all that he was—well, he was thrown out, and bought in at the sale at the reserve price of 50 guineas!

There were a few decent heifers, and some old celebrities amongst the cows, which were about the most mixed lot that any pure breed of cattle could possibly present. The total number of entries was 378, and the judges were Mr. Hy. Dudding, Panton, Wragby; Mr. John Lynn, Stroxton Grantham; Mr. John Thompson, Badminton, Chippenham; and Mr. Richard Woods, Hipstone Park, Mansfield.

There was very little competition amongst the buyers, who appeared to be few, and the prices obtained for some of the best strains of blood would seem to be out of all character with the high pretensions of the breed. The following is the prize list:—

Cow or heifer exceeding three years old.—First prize, £10, exhibitor and breeder, T. Kingsley, Aylesbury, Bucks (Sorghans 5'h); second, £5, J. J. Sharp, Broughton, Kettering (Julia 10'h).

Heifers, between two and three years old.—First prize, £10 Messrs. Horsley and Son, Colton Manor House, Rugeley (Hilda); second, £5, T. Atkinson, Unsworth, Manchester (Veases).

Heifers, between one and two years old.—Prize, £10, W. Arkell, jun., Hathorop, Fairford, Gloucestershire (Sweetbriar 5'h).

Heifer calves, between six and twelve months old.—Prize, £5, T. Hower, Inglesham, Lechlade, Gloucestershire (Caterina No. 11).

Bulls, between ten and twenty months old.—First prize, £50, Messrs. Horsley and Son (Snow King); second, £30, J. Elwell, Timberley, Castle Bromwich (Baines Windsor 2d); third, £10, Lord Moreton, Tortworth Court, Gloucestershire (Prince Louis).

Bulls between twenty and thirty months old.—First prize, £10, T. Fears, Haeckthorne, Lincoln (Arius); second, £5, Colonel R. Loyd-Lindsay, V.C., M.P., Wantage, Berks (Don Carlos).

Bulls exceeding thirty months old.—First prize, £10, exhibitor W. G. Garne, breeder O. Viveash, Strengsham, Twykesbury (Skylark); second, £5, the Rev. R. B. Kennard, Marahull, Blandford, Dorset (Marquis of Blandford 4'h).

Bulls, between fifteen and twenty months old.—First prize, £30, Earl Beauchamp, Madresfield Court (Cranmore); second, £10, Earl Beauchamp (Robin Agair); third, £5, G. Hower, Ley Gore House, Northleach, Gloucestershire (Lord Littleton).

Bulls, between twelve and fifteen months old.—First prize, £30, and extra prize of £10 for best bull in classes 5, 8, 9, or 10, W. G. Garne, Broadmoor, Northleach, Gloucestershire (Sir Sidney Newport); second, £10, Colonel R. Loyd-Lindsay (Julius); third, £5, J. G. Attwater, Brisford, Salisbury (Admiral Hornby).

Bull calves, between six and twelve months old.—First prize, £20, C. Hobbs, Maizey Hampton, Fairford, Gloucestershire (Tredegar); second, £10, the Rev. H. Beckwith, Eaton Constantine, Ironbridge (Gregory); third, £5, S. C. Pilgrim, the Outwoods, Hincley (Quickstep).

The extra prize of £10 for the best lot of not less than five young bulls was won by Mrs. Mace, Sherborne, Northleach.

## THE ADULTERATION OF MILK.

On Tuesday a deputation from the Metropolitan Dairymen's Society, the Manchester and Salford Milk Dealers' Protection Society, the Glasgow Milk Dealers' Association, the Liverpool Milk Dealers' and Cowkeepers' Association, and kindred societies throughout the United Kingdom, had an interview with Mr. Slater-Booth, at Whitehall, to represent to him the unfair manner in which the Food and Drugs Act of 1875 worked in respect to the sale of adulterated milk, and to ask that an amendment Bill may be brought in to remedy the defects complained of. Sir Thomas Bazley, M.P., Mr. Jacob Bright, M.P., Lieutenant-Colonel Walker, M.P., Mr. Hopwood, M.P., and Mr. F. Pennington, M.P., accompanied the deputation.

Sir THOMAS BAZLEY, in introducing them, said they not only represented the milk trade, but the inhabitants of the country. They wanted pure milk, and trusted Mr. Slater-Booth would do what he could for them.

Mr. E. C. TISDALE urged that the Food and Drugs Act 1875, had been conceived too much in the spirit of reaction towards the retailer, and that the wholesale producer had been to an extent left unmolested by it. He asked that when that Act was considered by the Select Committee appointed for the purpose, a clause should be inserted that when milk was delivered, wherever the delivery might be, the purchase within the meaning of the Act should be considered completed. That the analyst for the district where the article of food was delivered should make the analysis, because it had been found that when proceedings had been instituted against the farmers for selling diluted milk, the analysts refused to test the samples bought at railway stations as being outside their jurisdiction. That had happened in the City, in Southwark, and St. Pancras. The analyst's certificate should contain the component parts of the article analysed, and a copy be delivered to a defendant four days before proceedings were taken. The analyst should have the power, by himself or his inspector, to enter any railway station and take samples of milk. As things were at present there was no chance of the retailer selling pure and unadulterated milk; 250 samples of the milk so sent had been analysed, and two-thirds found impure; and in the bulk of those cases it had been found impossible to follow up with prosecutions.

Mr. EDGE (of Manchester) endorsed all that had been said, and added that there was no control over the farmers, and in consequence they doctored up the milk with impunity. The report of the Manchester City Analyst showed that there were 47 of the dairies coming below the standard required by law.

Mr. SLATER-BOOTH said the Act was a peculiar and difficult one, no doubt, to put into operation; but if it had been successful in anything, he should say it was in regard to milk; and the policy of the Act was to place the responsibility of selling pure articles upon the shoulders of the retailers. He dared say that it worked hardly, but they ought to show that their case was different from that of other retailers. The retail grocer had been there with a similar complaint as to the difficulty of getting at the wholesale person from whom he bought goods; but clearly the Act was that the purchaser was to be protected, and the retailer responsible if he retailed impure articles. But on articles of food the greater part of the complaint was made by small sellers. Of course the sale of milk, through the agency of a railway communication in great towns, was a matter of great importance to farmers and sellers of milk, and he should have thought when they found the milk watered down that that would be sufficient to make them look out for the purity of the milk sent to such towns as London, Manchester, and Liverpool. At the same time, he felt the great trade in milk presented some feature of difficulty, and he would consider the points laid before him, to see whether it would be possible to make any alteration in the law.

A long discussion ensued between Mr. Jacob Bright, the deputation, and Mr. Slater-Booth on various points of detail, after which the deputation thanked Mr. Booth and retired.

**CARTERS' FARM SEED BOOK.**—Messrs. Carter's list for the present season is attractively printed and illustrated, and there is more in it to read, mark, and inwardly digest than to comment on. It is a business-like book, and does not deal with the science of agriculture in any way. It contains a few directions as to sowing; but Messrs. Carter evidently assume that farmers and gardeners understand their business, and, therefore, they do not attempt to give them any elaborate instructions as to the cultivation of the soil and the sowing of their crops. They prefer to "point a moral" from their great success at the Paris Exhibition, and other triumphs in the way of great weights grown and prizes won by the purchasers of their seeds.

## FARMING IN AMERICA.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—A friend of mine who left England thirty-five years since has just returned to this country on a visit to his friends. I have had some talk with him on the state of agriculture in his country, and have given below his answers to my questions. I have no means of verifying his statements, but knowing him and his friends to be highly respectable people, and believing that he speaks the truth as far as he knows, I give it as I received it for the benefit of your readers. He states as follows:—

I have been thirty-five years in Michigan. I bought 160 acres of land; cleared it; sold off the timber to a railway contractor, and paid for my farm by that means.

My land is good. There appears to be no end to the depth of the mould; it is very pliable and light; it does not require draining; water never stands on it. I can plough three acres a day with two horses. I and my sons do most of the work.

Labour at ordinary times is from 8s. to 4s. per day, with board. At harvest time it is 8s. to 10s. per day. These are the usual terms.

One man can do as much as three in England, on account of the use they make of machinery. We do not cut peas with a scythe, but horse-rake them into lumps before they are dead ripe, by which means we can get together ten acres in six hours.

A woman often drives a reaping-machine, and will cut ten acres of wheat a day, and four men will bind it.

The land is dressed by sowing clover; 12s. worth of cloverseed to ten acres will be sufficient dressing to produce thirty bushels of wheat to the acre when it is ploughed-in. Clover grows with certainty, and it flourishes so abundantly that it smothers and kills all weeds and other plants.

Maize is grown with very little expense; when it is once planted one man will hoe and keep clean 100 acres. When ripe, which is about September, it is left until winter, when cattle are brought in from the prairie and turned into it as it stands; the bullocks eat what they can, and what they tread down the hogs are turned in to finish.

Cattle are raised very inexpensively. It has been proved many times that a calf can be bought and raised to four years old, and fattened fit for the market, for £3, or 4 dollars per year.

They do well on prairie grass and prairie hay, but do not get fat until turned into the maize. The hay can be bought at 6s. per ton. The prairie is public ground—the property of “Uncle Sam.”

When asked if he thought the Americans would continue to send cattle to England, my friend exclaimed: God bless you, yes! We are just getting ready for it. We find that pays better than corn, and shall flood your markets. My opinion is that we shall lose money at corn-growing at present prices, which are from 3s. 2d. to 8s. 4d. per bushel. We are satisfied with 4s. per bushel. But there is no sale at present prices, as all the stores are full of corn. England is our only market; we shall continue to send supplies as long as your ports are open at the best prices we can get. We can do nothing else. We have all got our farms, and we must find a market for our produce and live according to the times.

I have known as much as 50 bushels of wheat per acre grown in my district, but the average for the whole of the United States is about 12 bushels. Wheat grows best in the shade, under apple and other trees. Many people, in clearing the land, cut the bark off the trees, which kills them, and they leave them standing and grow good crops under their shade.

On my passage to England I asked the steward of the ship Victoria (Anchor Line) what the freight on corn

was? He said, “Various prices; the 70,000 bushels now on board we are bringing over at 9d. per bushel.” Live stock, which was also on board, at £6 per head. It also costs £6 per head to transport cattle from the farms to board ship.

Most of the farmers are very short of capital, which is the greatest preventive to their success. They borrow money at never less interest than 10 per cent.—often 15 per cent. I have known as high as 60 per cent. The bankers never lend money for less than 30 days. They charge 2 per cent. per month, or 24 per cent. per annum, interest paid in advance. Money lent on security of real property.

I have known farmers save money and become money-lenders, and save a fortune quickly. It is the best trade in America. Any person with capital need not work, as he will find plenty of people willing to work his capital for him and pay him 24 per cent. A neighbour of mine commenced with nothing; he saved money during the war; he is now a money-lender, and is worth 100,000 dollars.

There are scarcely any tenant farmers. Nearly all farm their own land. Those who cannot do that take a farm, and pay the landlord half the produce.

In Michigan an improved farm, with good buildings, orchards, wells, &c., can be bought at £12 per acre. Property is assessed at one-third its value; the property tax is 1½d. in the £; other rates the same, making total taxation 3d. in the £.

The people are very sober, and the Government will not license many houses to sell intoxicating drinks. The town of Irving has a population of about 1,000, and there is no licensed house in it, nor one nearer than nine miles. The people drink water. Michigan is 1,000 miles from New York. From England to Michigan it costs £39 steerage passage.

I shall leave England for Michigan on the 1st of March next. I should not like to farm in England again. I would not recommend old men to go to America, but young men who have £500 or £800—which would pay the valuation of a small farm in this country—would be able to buy a farm and stock it and do well in America.

Any quantity of farms in Michigan, cleared and supplied with buildings, are to be bought at this moment; they are daily changing hands in consequence of the depression since the war times. Farms are transferred from one owner to another in twenty minutes, the whole expense being 6s.; the county clerk does the work. All mortgages are registered by the same person, who is elected for the purpose for a term of years, and voted into office by the public. We hire our solicitors by the year.

What we stand most in need of is for the Government to advance us money direct, same as the English Government does for purposes of draining. Our Government lends it to the bankers at 10 per cent., and they lend it to us at 24 per cent. We have tried hard to get that state of things altered, but the almighty dollar beats us. Bribery and corruption are worse in America than in England. The farmers would do well if they could get money at the same rate as the bankers.

A farmer whose land is unencumbered could live if he sold wheat at 3s. per bushel. We sell it to shipping agents, and have to deliver it to the rail. Distance is of no consideration, because it is so easily moved on the snow on sledges.

Steam thrashers travel about. We sell our wheat in the condition in which it leaves the machine.

The winter season commences in December, and ends in April. Farming operations are dormant during that time, but the wheat grows well under the snow. The snow covers the ground to a great depth, and becomes as hard as ice. The labourers cut trees; they go 30 mile

to their work with a horse and sledge, and return the same day. The trees are carted on sledges made of four wheels, or rather irons, and the body is on the telescope principle. These sledges will take six trees, which are drawn to the river, where they are thrown in, to remain there until the floods come, when they are washed down to the lake to be cut up by the steam saw mills, built on piles on the lake, there converted into timber and sold at a very cheap rate. You can build a good house in a few weeks.

The snow obviates the difficulty of the want of roads to a great extent. Best horses can be bought for £20 each.

We have ploughs which take 12, 14, and 16-inch furrows; we generally use the 16-inch, and plough 8 inches deep with two horses.

We are not troubled with rooks, sparrows, rats, rabbits, hares, foxes, pheasants, and partridges, as you are in England. We have only one species of vermin, viz., squirrels, which are in great abundance, and eat the wheat and the maize. We shoot and eat them. They migrate from place to place in search of food.

We have no venomous snakes; only a few water snakes. Mosquitoes are to be found on the marshy ground, but we are not troubled with them.

I am told that English labourers think they cannot do harvest work without beer or cider. We find that we can do better upon water *with plenty of good food*, which our labourers have, as we board them; and we can buy beef, mutton, and pork at from 3d. to 4d. per lb. at the shops. We have no difficulty in getting it. When the heat is 90 degrees in the shade we cannot work in the sun.

Cattle are constantly passing my farm on the rail in trucks, the trains being about half a mile long, *en route* for embarkation. The Government compels the Company to unload them three times on their journey and give them hay, corn, and water.

We have a good staff of police, and life and property are very safe. I have never locked my door since I have been in the country. We always leave our tools out of doors, and never lose them.

I consider the appearance of England to be much improved during the last thirty-five years; all classes seem to be doing better.

I will leave my address with the Editor of the *M.L.E.* any one wishes for information respecting the country, I will do my best to supply it.

I am, Sir, &c.,

H. C.

## CARBOLIZED OIL FOR EWES IN LAMBING.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—May I ask if you will permit me to say that, having had a communication from the proprietors of the *Norwich Mercury* as to the use of carbolized oil for ewes after lambing, I have addressed the following letter to the editor of that paper, which will, I believe, appear in next Saturday's issue. I think it may interest your readers to know that the proprietors of the *Norwich Mercury* contemplate reprinting many letters which have appeared on the subject of the mixture, and which letters cannot fail to be interesting and useful to flockmasters, if I may judge from the great number of inquiries I receive respecting the carbolized oil. The letter to which I refer is as follows:—

"I am glad to learn you propose reprinting the letters which have appeared in the *Norwich Mercury* and other papers respecting the use of carbolized oil for

ewes after lambing. You will deserve the thanks of flockmasters generally in recalling their attention to a remedy for straining after lambing, which is calculated, if properly prepared and carefully used, to save the lives of many ewes that would otherwise probably die from that distressing and hitherto generally fatal disease.

"I receive numerous letters from flockmasters in this country, as well as from Ireland, testifying to the good effect of the mixture. I have also had letters from a few persons who have not been so successful in its use; but on inquiry I have invariably elicited the fact that the carbolized acid was of doubtful quality and purity, and had been most imperfectly mixed with the oil, and consequently it is more than probable that some of the acid had become, as it were, separated from the oil, and had thus been frequently used in its natural strength.

"This would undoubtedly cause great pain to the poor animal to which it was applied, and instead of the straining being relieved it would most likely be increased, and probably the ewe would die. This does not, however, prove that the remedy is not all that has been said in its favour, simply because persons for the sake of cheapness will buy an impure acid and mix it with the oil in a 'rough and ready' kind of way, rather than have the mixture prepared by a careful and painstaking chemist, who would be sure to do it properly, at a slightly increased cost.

"In the spring of last year an old flockmaster wrote a letter to one of the agricultural papers and ventured the opinion that even if the application of the carbolized oil should save the life of a ewe affected with straining after lambing, the action of the acid would have such a hardening effect on the mouth of the uterus as to prevent the ewe ever breeding another lamb. I was then unable, from want of experience on this point, to contradict the theory; but I specially called the Merton shepherd's attention to the matter, and requested him to mark the three ewes which were so seriously affected with straining after lambing last year, which ewes formed the test cases I had to deal with, and the particulars of which were given in my letter of the 6th March last, and printed in your own and many other papers.

"I may observe that the three cases referred to comprised a shearing and two three-shear ewes. They all took the ram early in the autumn of last year, and not one of them turned to the ram, and each ewe has produced two very fine, strong, and healthy lambs, which I venture to think fully disposes of the question raised as to the carbolized oil affecting the future breeding power of ewes.

"Not having this year, so far, had a single case of straining among the Merton ewes which have lambed up to this time, I have been unable to further test the mixture in an extreme case; but it is very possible that the immunity from the disease may have arisen from the fact that the shepherd has always applied the carbolized oil whenever he thought the labour was a difficult one, and in almost every case he has slightly dressed the exterior of the vagina and a short distance along its passage with the mixture."

It is possible that you may be disposed to find a place for the above letter in next week's *Mark Lane Express*.

I am, Sir, &c.,

HENRY WOODS.

*Merton Estate Office, Thetford, Norfolk,  
26th February, 1879.*

The New York Tattersall's, at the corner of Forty-second Street and Seventh Avenue, was burnt down on the 13th February, and seventy horses perished, including a pair of Norwegian ponies valued at £800.

## Chambers of Agriculture.

### CAMBRIDGESHIRE.

A meeting of the Cambridgeshire and Isle of Ely Chamber of Agriculture was held at Cambridge, on March 1st under the presidency of Mr. W. Marshall, of Ely, at which the present state of depression amongst agriculturists was discussed. Messrs. Rodwell and Hicks, two of the county members, were present. The annual dinner of the association was subsequently held at the Lion.

### EAST RIDING.

The monthly meeting of this Chamber was held at the White Horse Inn, Beverley, on March 1st, Mr. J. Lee, of Gardham, the President, occupying the chair.

Orders from the Privy Council respecting milk-shops and dairies, and the slaughter of foreign animals, were laid before the meeting.

Mr. F. JOHNSON, of Bishop Burton, continued the discussion from the last meeting on the Game Question, and gave some startling instances of the destruction to turkeys and other produce on his own farm and that of other farmers he had spoken to. The ravages on his own land, he said had caused him to give up breeding lambs, which he had previously done on a large scale. He had seen in the papers that one writer had said that what was wanted was a better feeling between landlord and tenant, and not a reduction of rent. He thought the instances he had given were not very likely to promote a better feeling between landlord and tenant. He maintained that what was required was a reduction of the ground game and a lowering of rents. If rents were reduced 10s. per acre farmers could live, for there was no country in the world that could grow more grain than they could in England.

Other members spoke on the same subject, and Mr. Johnson promised to give more startling accounts of the evils of ground game at the next meeting.

### HEREFORDSHIRE.

A general meeting of the members was held on March 1, at Hereford, Mr. Dearman Edwards presiding.

It was agreed to petition Parliament against the Highways Act, and the following resolution was passed "That this Chamber cordially approves of the resolution passed at the adjourned Quarter Sessions for the county of Hereford, on the 18th of January last, to make applications to the Local Government Board to reduce all roads to the status of ordinary highways, under the 16th section of the Highways and Locomotive (Amendment) Act, 1878."

On the subject of the County Government Bill, the following resolutions were passed, "That this Chamber generally approves of the County Administration Bill;" and "That in the opinion of this meeting, it is expedient that all the clauses from 9 to 21 be expunged from the County Administration Bill, and that it is inexpedient to divide the roads into two classes—ordinary and main roads, or to place any of the district roads under the Central County Boards."

### LEICESTERSHIRE.

The annual meeting of this Chamber was held on March 1st at Leicestershire, Mr. J. Glover presiding. The report and balance sheet were adopted, and ordered to be printed.

On the motion of Mr. HENYATE, M.P., seconded by Mr. WATSON, Mr. T. Nuttall was elected Vice-President of the Chamber for the ensuing year.

Mr. NUTTALL thanked the members for the honour conferred on him, and said he would use his best endeavours to fulfil the duties of the office during the year.

The president elect, Mr. C. Marriott, then took the chair, which was vacated by Mr. Glover.

Mr. HENYATE, M.P., moved a vote of thanks to the retiring chairman for his services during the year, which was seconded by Mr. PELL, M.P., and carried.

### NORTHAMPTONSHIRE.

A meeting of the Council was held on March 1st, Mr. J. W. Watts, chairman for the year, presiding.

Mr. T. J. ADKINS, the hon. sec., mentioned the subjects that were down for discussion at the Central Chamber on Tuesday, and stated that it had been hoped that the County Government Bill would have been printed by this time, so that they could have discussed its provisions; and Lord Barghley, M.P., and Mr. F. Phipps, M.P., had promised to attend and explain its provisions. But the Bill had not yet been printed, and, therefore, he supposed the Central Chamber would have to take it off the agenda for the next meeting.

Mr. ADKINS explained the leading provisions of the Valuation Bill, and referred to other subjects to be introduced to the Central Chamber.

The Rev WM. BURY, Hazelbeach, moved:—

This Council, while viewing with satisfaction the introduction of the Valuation Bill, regret it should not have been preceded by the County Government Bill.

He thought the latter would have simplified the question of valuation.

Mr. CHAS. BAYES, Kettering, seconded.

The resolution was unanimously carried.

It was decided that the question of "corn averages" and "sheep money" should be discussed at a future meeting.

### WARWICKSHIRE.

A special general meeting was held on February 28 at Coventry; Mr. Hodgson (Clopton), president, in the chair. The Chamber considered the "Suggested bye-laws to be made by the County Authorities under the Highways and Locomotives (Amendment) Act, 1878, 41 and 42 Vic., cap. 77, sections 26, 31, and 32, for the regulation of traffic upon main roads and highways." It was unanimously resolved that the exemption proposed to be made in favour of vehicles constructed before the passing of the Act should be expunged.

The CHAIRMAN recommended that they should endorse the resolution passed at the meeting on the 3rd of May last, "That the present system of maintaining the highways presses very hardly upon the occupier, and that in any future legislation, the arrear of payment ought to be extended, so that occupiers alone should not bear the onus of repairing the turnpike roads recently abolished." This was agreed to.

### WORCESTERSHIRE.

The following resolutions were adopted at the meeting of the Council of this Chamber on March 1st.

That this Council is of opinion that immediate steps should be taken by the Central Chamber to urge upon the Government the necessity of introducing a County Government Bill, in order to give effect to the views so frequently expressed in resolutions of Chambers of Agriculture.

That this Chamber expresses great dissatisfaction with the present system of Highway Administration, and complains that the Highway Act of last session of Parliament does not give the ratepayers in country districts that amount of relief which they had a right to expect.

It appears from all accounts that the 250,000 Canadian cattle which we have been told are feeding for exportation to this country exist, not in Canada, but the United States. A Chicago paper says:—"In Canada there are now stall-feeding some five thousand cattle, and any supplies exporters may get outside of these must come from Canadian farmers who stall-feed two or three steers for the spring markets. These will go but a little way to supply the foreign demand after the local trade shall have taken what it wants. For the rest the United States must be looked to as a source of supply." And this version of the matter entirely agrees with information sent us by our Canadian correspondent. Probably the "70 steam-ships" which are to be fitted-up to carry on the traffic, will resolve themselves into a few boats diverted from other trades, for the Liverpool liners are not overdone with freightage, nor likely to be.

## ROYAL AGRICULTURAL SOCIETY.

## MEMBERS' PRIVILEGES.

The following letter has been sent to every member of the Royal Agricultural Society.

SIR,—I am directed by the Council of the Royal Agricultural Society of England to call the special attention of the members to their privileges of Chemical Analysis, Botanical and Entomological Examinations, and Veterinary assistance in the case of disease amongst Cattle, Sheep, or Pigs, as well as to the fact that they may obtain advice from the scientific officers of the Society attached to these several departments.

In particular I am desired to point out that the charges to the members of the Society who are not commercially engaged in the manufacture or sale of substances sent for chemical analysis will, after March 25th of the present year, be reduced to about one-half of the rates which have hitherto been charged. This result has been obtained through the Council having erected a laboratory on the Society's own premises in Hanover Square, furnishing it with all necessary appliances, and supplying the consulting chemist (Dr. Voelcker) with an efficient staff of assistants, whose whole time will be occupied by the Society's work.

The charges for chemical analyses having been thus reduced to, in most cases, merely nominal amounts, I am desired to again urge upon you the necessity of purchasing manures and feeding stuffs by guaranteed analysis, under names which are recognised as distinctive of the highest qualities of the purchased substances, and which admit of no doubt as to their alleged purity; and further that the guarantee of the vendor should in all cases be immediately checked by a fair sample being at once taken and sent for examination.

I enclose a detailed statement of your chemical, botanical, entomological, and veterinary privileges, with full directions as to their use, and especially ask your attention to the detailed recommendations of the Council with regard to the purchase of manures and feeding stuffs and to the drawing of samples to be sent for analysis.

I am, Sir,  
Yours, very faithfully,  
H. M. JENKINS,  
Secretary.

## THE COST OF WHEAT-GROWING IN AMERICA.

Mr. George Osborne, of Kingston, Canada, writes to the *Times*:—

A letter in the *Times* weekly edition of the 24th ult. from Mr. Savory, asks for information as to the cost of producing wheat in the United States. I have much pleasure in giving you the cost per acre in the spring wheat States—Iowa, Nebraska, Dakota, Minnesota, and Wisconsin:—Ploughing, 1 dol. 50c.; dragging and sowing, 1 dol.; seed, 1 dol. 50c.; harvesting, 2 dols 50c.—3 dols 50c.; equal to £1 6s. 9d., to which must be added 10c., or 5d. sterling, per bushel for thrashing, &c. For new land add 2 dols., or 8s. 4d. sterling, for breaking. Minnesota certainly raises more wheat to the acre than any other state in the union, her average for the last 10 years being nearly 16 bushels per acre. Taking the United States as a whole I find the average for the last 5 years ending 1877 to be very slightly under 11 bushels per acre. The spring wheat states named above have on an average for five years produced a fraction over 13 bushels per acre. The greatest known yearly average of Ohio, the largest producer of the winter-wheat states, is 17½ bushels; while the average for ten years, as officially shown, is 10-55 bushels per acre. Illinois produces year by year not more than 10 bushels per acre; Iowa, 14 bushels, California, 13; Kansas, 13; Wisconsin,

14. You will see from this the superiority of British agriculture, the average in the United Kingdom in favourable seasons being 30 bushels per acre. I may add the cost of moving grain from the interior to the seaboard during open navigation will average for the last three years under 9d. sterling per bushel.

Mr. Thos. C. Scott thus comments on Mr. George Osborne's letter:—

If the cost of transport and marketing American wheat is added to the estimated cost of production, as furnished by our Canadian correspondent, Mr. George Osborne, of Kingston, in the *Times* of Thursday, we shall have some very reliable data to enable us to judge of the American's ability to supply us with wheat when the market price in this country is, as at present, under 5s. a bushel.

Summing up Mr. Osborne's figures and converting the dollars and cents into shillings and pence, the amount per acre stands thus:—Ploughing, 1 dol. 50c (6s. 3d.); dragging and sowing, 1 dol. (4s. 2d.); seed, two bushels at 75c. (3s. 1½d.), 1 dol. 50c. (6s. 3d.); harvesting, 3 dol. 50c. (10s. 5d.); thrashing, 13 bushels per acre at 10c. (5d.), 1 dol. 30c. (5s. 5d.); breaking up new land, 2 dol. (8s. 4d.)—this item may safely be included, as large areas of old cultivated lands are annually abandoned and fresh lands brought into cultivation—9 dol. 80c. (40s. 10½d.) Add for rent, or interest on cost of freehold—say 9 dol. 60c., or 23, per acre at 5 per cent.—48c. (3s.) Cost of production, 10 dol. 28c. (42s. 10½d.) Add cost of conveying the saleable produce to English markets—say 13 bushels per acre less two retained for seed; moving from interior to seaboard, per Mr. Osborne's figures, 11 bushels at 18c., or 9d. per bushel, 1 dol. 98c. (8s. 3d.); sea carriage and landing, insurance, commission on sale, &c., 1 dol. 98c. (8s. 3d.)—3 dol. 96c. (16s. 6d.) Total cost of cultivating an acre of wheat in America and marketing the produce, 14 dol. 24c., or 59s. 4d.

To meet this expenditure it is estimated that 11 bushels on an average out of a product of 13 are sold, and at the present time this would barely realize 55s., or 4s. 4d. per acre less than the above estimated cost.

The average produce of wheat in this country is about twice and a half as much as that in America—namely, 30 against 13 bushels per acre; and last year's crop will probably afford a saleable product of 26 bushels an acre. Taking this at the same rate as applied to the American yield, we have 130s. against 55s. for the produce of an acre of wheat.

The estimated loss, as above shown, to the American grower on last year's crop may be less than may turn out to have been incurred by the British cultivator, but the figures do not leave him altogether without hope that in better times and with greater freedom of action in cultivation and economy of labour he may be able to continue to cope with his great American competitor in the profitable production of wheat.

**BONEDUST AND WILD CLOVER.**—To affirm that bonedust, unless mixed with superphos, is worthless applied to grass and on stiff clay, is directly opposed to our observation. We will narrate a fact. Forty years since unboiled bone was applied at the rate of 20 cwt. per statute acre to poor old pastures on stiff clay in Cheshire, and the land has since remained in grass, and the result was wonderfully advantageous and still visible. It was recently reported by the *Sporting Gazette* that Mr. W. T. Carrington, of Croxton Abbey, had stated that an abundant crop of white clover followed from the application of bone dust on stiff clay pasture. But it is no new fact. The communication would have been interesting if Mr. Carrington had acquainted his readers whence came the white clover for analysis shows the seeds are not in the clay or the bone. It is one of the marvellous problems which science has not yet satisfactorily solved. There is another one. Take, for instance, a sandhill near a sea shore; analyse the sand. There are no traces of the seed of white clover in it, but a gentle and continuous trickling of water falling on it will be followed eighteen months afterwards by a sweet and abundant herbage of white clover. The reflective reader will quickly perceive the foregoing shows the origin of oases in deserts.—*Ducan & Co's Circular*

## VARIOUS NOTES.

Our Canadian Correspondent writes under date of Feb. 17th:—It is impossible to imagine a more ludicrous position than that which certain entities in this quarter, who have been at the bottom of the bogus statements circulated for the last 18 months in England respecting alleged exportations of "Canadian" cattle, are now pilloried in through the stoppage of the American supply of beefs owing to the action of the Canadian Privy Council. To realise the situation you only have to recall what I have before mentioned, that the total of graded beasts, suitable for the British market, this country can spare is about four or five thousand a year; and that the cattle over this amount, claimed by certain wily interests and by the Liverpool and other emigration fabulists, have all along been bought by sundry American and Canadian speculators (located at Toronto chiefly), in Chicago, Buffalo, and other places across the line, and passed on to England via Boston, or over the Grand Trunk Railway, by Montreal and Portland. These large consignments of cattle have been systematically, and for a purpose, chronicled in the English journals through the medium of paragraphs forwarded to the papers, as "Canadian" beasts, simply because they were purchased by Toronto buyers. To the absolute truth of this I would take affidavit. Indeed, it is known to everybody here who takes any interest in the subject. On the absurdity—not to say fraud—of calling cattle bought in the States "Canadian" stock, I need not enlarge. As I said in a previous letter, it does not matter—*apart from the presence of disease in the States*—to the English consumer, whether the meat he consumes is dubbed an American or Canadian export. But this system of misrepresentation, I must repeat, is carried on for an object. What is that object? It is set forth pretty clearly in a letter signed "A Member of the Legislature," which appeared a few days ago in a Toronto paper. This ingenious gentleman says:—"Every ship-load of live-stock we send over to England is an advertisement in our favour." An advertisement of what, and to whom? This also he tells us, as follows:—"But we want more than this, and I think it ought to be supplied without any perceptible increase in the cost of emigration work. The condition of the tenant-farmer class at home, and the abundant openings Ontario affords to settlers of this class, with some means, makes the effort to reach them with the right kind (?) of information more important now than at any period in our past history." Here we have the cat out of the bag. The object of parading Canadian (pretended) cattle exports is to entice the English farmer to emigrate to Canada. Look at this humiliatingly ludicrous position in which the gentry who have been working the oracle in the British press—even to the extent of imposing on the London *Times*, the marvellous statement that "Ontario" has 250,000 cattle and 500,000 sheep now in stalls, ready to pour into Britain in the spring—are placed through the Dominion Government having put an embargo on the American supply. The *Toronto Globe*, which, a week or two ago, was cornered by stress of events into the naïve admission that till the "Canadian" exports to England began there were no importations of American stock into the Dominion, says in its issue of February 5th:—"The cattle trade with England—*id est* the Canadian trade—is at a stand-still for the present. . . . The English Privy Council, urged on by the agricultural interests, are considering the advisability of scheduling the United States as an infected country. Should they not do so, however, the Canadian Government will have to undo at once what they have done, in prohibiting for three months the importation of American

cattle into Canada, or their passage through the Dominion. If this is not done the effect will be, of course, to send all the trade to the United States during that period!" This is a truly extraordinary avowal, especially seeing that Ontario has 250,000 cattle waiting for export. But further, the *Globe* says:—"The Order in Council passed at Ottawa last Saturday declares that the importation of live Canadian cattle into England will be permitted to continue." Dealers in Toronto look on this permission as a mockery. At present Canadian cattle cannot be "shipped to the English market, with the faintest prospect of realising a profit. Indeed, Toronto dealers say they could not make any profit if they could get the animals free of cost. Two months hence the case will be different, as by that time the farmers (?) will have been able to fatten their stock. Even in the case of heavy cattle the margin over cost and freight is not great. And when it is considered that shippers have to pay freight on the number of cattle, irrespective of weight, it will be readily seen that nothing can be done just now in the way of shipping Canadian cattle! The report current yesterday that the Toronto Export Company were making up a cargo of Canadian-bred cattle for shipment to England is incorrect. No such project was ever contemplated." I can easily credit that.

The farmers of France are bestirring themselves with the view of inducing the Legislature to relieve agriculture from its present depression by augmenting the dues imposed on imported agricultural products, these dues being in their opinion so insignificant as to approach free entry: and by applying the funds so obtained to the diminution of the tax on landed property. The Customs Commission received the delegates of the Society of French Agriculturists on two days recently at the Bourbon Palace. The delegates suggested that the Customs regime, which will shortly occupy the attention of the Chambers, should be established on this double basis—Equality between agriculture and other industries; and commercial reciprocity. The five societies of the Seine-Inférieure having coalesced with the central society of that department, have declared a permanent sitting, and have taken the title of Reunion of the Agricultural Societies of the Seine-Inférieure. Adopting conclusions similar in scope to those above named, they differ in proposing that the funds obtained by increased protection should be devoted to lightening the taxes on sugar and on beverages. The Agricultural Society of Verdun proposes that the duty on wheat and cattle should be 2*fr.* per 100 kilos., and on wool 4*fr.* per 100 kilos. The societies of Rheims and of Damville (Eure) propose a return to the moveable scale, the latter adding a suggestion that the duty on wool should be 10 per cent. of the value of the imports, and that the proceeds should serve to relieve agriculture of its present heavy burthens.

In the face of this movement it is not surprising that the Chamber of Deputies has voted against the project introduced by the Senate in 1877 for relieving the proprietors of lands ravaged by the phylloxera, by a slight addition to the land-tax. It was proposed to realise about £90,000, but it was found that even with this sum a small holder, say of about an acre, would only be entitled to about 1*fr.* compensation. The Commission appointed by the Chamber of Deputies, therefore, while rendering a just tribute to the good intentions of the Senate, ruled that the proposition to grant such relief during four consecutive years was utterly impracticable.

M. Paul Leroy-Beaulieu writes, in the *Débats*, that a league exists, having for its object the increase of the price of bread. He has become possessed of two printed documents which have been addressed to all the mayors of France.

The first requests these functionaries to distribute a petition, of which the second is the text. This latter begs the President of the Republic to levy a tax of 4*fr.* per quintal, or 16 per cent. of the quoted price, and 10 per cent. on wool. The mayors are requested to obtain the signature of the "petite culture" as well as those of the larger farmers and proprietors.

The new Minister of Agriculture and Commerce, M. Pierre-Emmanuel Tirard, was born at Geneva, in 1837. After being employed in the administration of roads and bridges, he founded an export jewellery house in the Boulevard de Sebastopol. In 1870 he became mayor of the 2*d* Paris arrondissement. Next year he was named member of the commune, which honour he resigned at the preparatory sitting. Since that time he has been a member of the National Assembly, where he has constantly voted with the Left; while his commercial knowledge has caused his appointment on numerous commissions.

Attention has recently been called to the reported existence of a cattle disease in the United States, the description of which corresponds very closely with epizootic aptha, which we call foot-and-mouth disease; and we have since read in a Chicago paper, the *American Stockman*, that it is said "a pig which has once passed through the Chicago stock-yard never has afterwards a sound hoof." Swine are very susceptible to this disease, and we are not aware that any form of contagious foot-rot has ever been proved to affect the pig. Therefore, if the above statement is correct, our American friends may have more contagious diseases of animals than they wot of. Indeed, we are inclined to think that very little attention has been paid to the matter there, and, practically, no notice taken of cattle diseases; and from private information we have received it appears that many of the disclaimers which have appeared in the trans-Atlantic press respecting the existence of pleuro-pneumonia in the States, have proceeded from a genuine belief that it was confined to towns in the Eastern States, non-contagious, and therefore a different thing altogether from the contagious pleuro-pneumonia of Europe. Certainly we shall be glad to interpret much that has been said and written in that light. But now that the truth has been made known, it is quite unworthy the American journals to impute not only a want of knowledge but a lack of common honesty of purpose to our officials here who decided that the diseased cattle *ex* Ontario were actually affected with the contagious pleuro-pneumonia of Europe. For example, we read in one of them, that the cattle *ex* Ontario were suffering from "ordinary pleuro-pneumonia caused by exposure," and that the result would have been different had the Government Inspectors been unbiassed by wholly groundless suspicions! This is not only in bad taste but it is bad judgment, for the veterinarians who decided the matter must not only be held to be fully competent, but also above the suspicion of unworthy motives in the exercise of their professional duties. So far indeed from being anxious to find contagious pleuro-pneumonia in trans-Atlantic cattle, our authorities had made no preparation whatever for its reception, and had to outrage both the letter and the spirit of the Foreign Animals Order, and of the Contagious Diseases (Animals) Act itself. Our American friends have much to learn on the subject of contagious cattle diseases, and we sincerely hope that their ultimate experiences of them may not equal our own, but it is worse than useless to deny the existence of diseases which may be found to have sapped the very vitals of their cattle producing industry before they were discovered. If pleuro-pneumonia and foot-and-mouth disease, or either of them, have spread, unsuspected and undiscovered, to the breeding grounds of the west—where

there is no organisation of remedial measures, no veterinary science, no belief in the magnitude of the danger, and scarcely any limit to the movements of the stock—then we fear that there is a trouble in store for American stock-breeders, the extent of which can scarcely be estimated by the data afforded by Australia, by Europe, or even by the losses sustained in the United Kingdom itself. We would fain persuade them the interests at stake are of a magnitude compared with which their export trade of live cattle and dead meat is of the very smallest consequence, and that they will bitterly regret every day wasted in stamping out the evil, if, perchance there is yet time.

The *New York World* reports the cattle disease spreading along the river Hudson, and says that Professor Law is investigating. The Canadian export cattle trade is not affected by the action of the English Privy Council yet it is as entirely stopped as though it had been—the Toronto shippers not being able to make up cargoes owing to the exclusion of American cattle from the colony by the Dominion authorities. The ridiculous statements which some people are managing to get into English papers, can only excite a smile in those conversant with the facts. For instance, they are gravely parading the intimation (supplied to them no doubt by persons interested) that the cattle from the States shipped by the Ontario were in strict quarantine, in transit through Canada, in face of the fact that a lot of Canadian cattle about fifty in number, were put on board the trams in Canada and shipped with them from Portland. The *Toronto Globe*, having donned its prophetic mantle, gives a forecast of what the "Canadian" cattle export trade to Britain is going to be this year, and if it does not amuse your readers they must be dead to the ludicrous. Says the *Globe*:—"According to the wording of the British Act it is not American cattle which are excluded from the inland market, but cattle 'brought from' the United States of America. Hence, as soon as navigation opens the Canada trade can go on as usual, drawing part of its supplies from the Western plains (of America), which are entirely free from cattle disease." [Where, ah! where are those 200,000 beasts, stall-feeding in "Ontario?"] . . . Of course, if American cattle leave a Canadian port they become Canadian cattle, according to the British Cattle Diseases Act. If disease were to be discovered among them it would be Canadian ports on which the embargo would be laid. . . . It is plain that in order to prevent the smallest chance of an infected Eastern animal being among the cargo, only the extreme Western ports of Ontario should be open to American cattle, &c."

In other words the *Globe* has the simplicity to believe that while the English Privy Council shut out American living bees, sent from the States direct, they will allow Toronto exporters to bring in as many as they can get hold of in the character of "American cattle," pantomimically hocus-pocused into "Canadian" cattle by the process of simply shipping them from Montreal and Quebec. A very wild supposition this. Besides, why do the "Canadian" exporters want to be scouring the Western plains for export cattle at the imminent risk of introducing disease into Canada (and Britain), when they have now in stalls (vide *Times*' Ottawa correspondent) in "Ontario," 200,000 head fattening up so John Bull's gourmand stomach? If they sent a ship a day it would take them a year or two to clear off that immense army of bees. However, as I have before fully explained, the "Canadian" trade boiled down resolves itself into that magic transformation of "American" into "Canadian" beasts, effected through their purchase and shipment by Canadian exporters. With the exception of a



few thousand native beasts, fed in distilleries during the winter, and sent to England in the spring and summer, that sort of "Canadian" export trade is the only trade which has ever yet been. The present total collapse was inevitable, therefore, as soon as the American supply stopped. The *Toronto Globe* is wrath with the Dominion Government for "rashly" forbidding the importation of American beasts into Canada, before the British Government acted, a censure which may be interpreted in the light of the above facts. Sir John Macdonald and his colleagues are too able men, and too conversant with Canadian matters, however, not to know the humbug of the pretended Canadian export trade, and were not likely to allow the health of Canadian cattle in general to be jeopardised merely that a few Toronto and other dealers and forwarding interests might make vast sums by buying American beasts in the States and passing them on to Britain as Canadian bees. The Canadian farmers, as a body, do not care two cents about the cattle export business. In fact, they are calling out for a duty against American cattle, and view the embargo on them with satisfaction. Nearly everybody else is indifferent.

Mr. Mculloch, of Melbourne, recently purchased from Mr. George Fox, at a high price, the promising seven months old roan hull Duke of Elmhurst, by 5th Duke of Wetherby, and out of Mr. Fox's 3rd Duchess figure of Airdrie.

It has been stated that Cumberland farmers, desirous of getting rid of the costly services of middlemen, have organised an agricultural co-operative society, with the view of establishing a dead meat trade, so as to reduce the price to consumers, while securing to the meat grower the full market value of his produce.

It is stated in the *Banffshire Journal* that Mr. Bruer, Braithwaite Hall, has sold three young Short-horn Bulls to Mr. Bolton to go to South America. Two of the animals are of the Flower tribe, one being Stephanos, a roan, by Star Regent from Scintilla Flower; and the other, Lorraine, a rich roan, by Star Regent from Welcome Flower. The third is of the Rose Tribe, Ludovic, by Star Regent from Rosa Lavinia.

The San Antonio *Daily Herald* of the 2nd ult. announces the arrival of six Oxfordshire Downs (of which four are ewes and the others rams), imported direct from Mr. Charles Howard's flock at Biddenham, by Mr. William G. Hughes, and taken out under the immediate superintendence of Mr. Edward Hobson.

The annual show of the Northumberland Agricultural Society takes place this year at Berwick-on-Tweed, on Thursday the 24th of July. The last show of the Northumberland Society at Berwick, in 1876, was one of the best the Society has held, including many of the leading prize animals of England and Scotland.

The use of maize as food for horses has been tried in various ways, and the result has been tolerably uniform; it answers better for slow work than for fast work. The West Division Street Railway Company of Chicago which works constantly some 2,000 head of horses, after carefully experimenting upon various kinds of food, have adopted a mixed ration of maize and oats ground, and used with cut hay, slightly wetted. In winter the proportion of corn and oats are two-thirds in bulk of cornmeal to one-third in bulk of ground oats; but, as warm weather approaches, the proportions are gradually changed, until, through hot the months, they are exactly reversed, and then, again, changes upon the advent of winter. In Austria the use of maize has not been successful. The Minister of War tried the experiment on 5,200 horses, of which four-fifths were taken from the cavalry and the

remainder from the artillery and train, the animals being fed partly on maize for six months. Professor Bruchmuller, who conducted the experiment, reports that the horses as a rule took easily to the new diet, and, digested it very well, even when it was given dry and whole. The horses increased in weight, and their coats got to shine, but they seemed to lose in vigour as compared with those fed upon oats. This was especially noticeable in their fast paces, and it was also remarked that they sweated much more profusely. In the southern provinces of the Austro-Hungarian empire, the animals fed on maize did better than those in the northern part, and this harmonizes with the known fact that the heavy draught horses used upon the farms in the south of Hungary and Croatia do very well upon this food. Professor Bruchmuller states that the Vienna Tramways Company, which has made similar experiments upon its horses, found that the saving in the cost of food did not compensate for the loss of power and speed; and his conclusion is that maize can only be used to advantage for horses that are not required to move out of a walking pace. In France similar experiments have been made with similar results. According to reports sent in by French army officers to the Government, it has been found that in whatever proportion maize be substituted for oats, loss of muscle and energy manifests itself, besides which the horses sweat inordinately, and are easily blown. The Ministry of War has directed this system to be discontinued. The Paris cabmen, too, are unanimous in their condemnation of maize, as may readily be understood, for cab horses cannot usually spare much energy. The London Omnibus Company and the Manchester Carriage Company have tried the use of maize, but we are not aware of the actual result. From all the testimony thus brought to bear on the subject, it would appear that the use of a proportion of maize in the food of agricultural horses, especially in the winter time, would be economical and advantageous. In connection with this subject we read that in Russia, according to the *Landwirthschaftliche Presse*, cakes consisting of 30 to 40 per cent. of oats, 30 to 50 of peas, 10 to 20 barley, 15 to 20 linseed meal, and 1 to 5 per cent. of salt, three-and-a-half inches in diameter, and three-quarters of an inch in thickness, are used for the cavalry, and are strongly recommended for that purpose on account of their portability and their keeping properties. These biscuits have to be soaked in warm water before being used, which is a difficulty and an objection for army purposes. But cakes of this sort would be a very useful and convenient form in which to take horse food on journeys in the country, where a good feed of corn cannot always be depended on.

The Government of the United States has decided to continue the prohibition against the importation of British cattle, on account of the "existence of Pleuro-pneumonia in England." Quite right.

American papers report a recent shipment of 25,000 dols. worth of cattle, horses, and sheep for a single farm in Japan.

In an American paper states that the State Legislature and Governor of New York State have taken steps to prevent any spread of pleuro-pneumonia. Ten thousand dollars have been appropriated for expenses, and authority has been given to Gen. Patrick, and Prof. Law, of Cornell University, to resort to stringent measures in order to extirpate the disease. The powers given to Messrs. Patrick and Law are—"To quarantine all infected stables; to slaughter all diseased animals; to quarantine all persons coming in contact with diseased animals; to disinfect all cars and stables occupied by infected animals, and to prevent healthy animals from being brought into infected stables." The trouble is said to be confined to Long

Island yards and stables, so far as is known, and "is the same disease from which the so-called swill milk stables have been seldom free."

Prussian live-stock statistics show that during the official year 1877-78, 70 horses, 1,903 beasts, 1,827 sheep, and 202 swine died of anthrax; 18,589 beasts, 2,435 sheep, and 2,047 swine of foot-and-mouth disease; 1,980 beasts of lung disease; 2,848 horses of glanders; 8,888 sheep of sheep-pox; and 1,809 sheep of rot. Within the same period 571 dogs, 6 horses, 182 beasts, 88 sheep, and 16 swine were put under control as suspected of rabies; 187 dogs were killed as unowned and 1,089 as rabid.

The annual sale of pure-bred Shorthorns bred by Messrs. Robertson Bros., of Victoria, Australia, in January last, realised an average of £116 13s. 4d. for bulls and £198 15s. for cows and heifers; whereas last year the average for bulls is stated to have been £792 15s., and that for cows and heifers £1,102 10s., two of the heifers by a Cherry Duke bull making together no less a sum than 4,050 guineas. Blue blood Shorthorns show a "shrinkage" in value akin to that which overtook the talip mania some years ago; the values in either case being purely artificial.

We are in receipt of private catalogue of Mr. W. Bliss's herd of pure-bred Shorthorns, containing the pedigrees of forty-four cows and heifers, and sixteen bulls, including Elmhurst Prince of the American Princess blood, and Prince Leopold by Mr. Fox's Duke of Airdrie 24th, both of which are on service at the farm, Chipping Norton. On the 14th of May about fifty of these animals will be offered for sale by public auction on the premises of Messrs. Finlay Dunn and Wm. Strafford. Two of the females, Geneva Verity and Baroness Burdett, are intended for show at the London International Exhibition.

In the *Journal d'Agriculture Pratique* M. Lecouteux, enforcing the programme of the French Societies—equality between agriculture and other industries—points out the injustice done to the agricultural interest in that while this latter is left to the free competition of foreign nations, other industries are protected to the extent of 25 to 60 per cent. He shows that the customs receipts would be augmented by more than one-half by a uniform rate of 10 per cent. on all imports. Admitting that free trade in wheat was from 1860 to 1876 beneficial to producer and consumer alike, he remarks that the new condition of the trade brought about since the latter date by the immense imports from America justifies farmers in attempting to fix heavier dues on wheat than those of the projected tariff, which are 60c. per quintal on wheat, and 11.20c. on flour. Again, if farmers turn their attention from corn-producing to cattle rearing, this transformation requires time and capital; and while the present crisis is unfavourable to such effort, the imports of cattle increase, while sanitary measures may at any time curtail the exports. Under such circumstances it is not astonishing that they should propose a duty of 10 per cent. on cattle.

On the other side of the question the agricultural societies of Gironde have issued a manifesto setting forth that none of the products of the soil are protected; that the wines of Spain and Italy are admitted at a duty scarcely equal to the tax on home production; that they do not complain of this, but insist upon a revision of the existing treaties of commerce in the direction of free trade—frstly, that they may be able to procure materials required for their industry, and principally iron, without

prohibitory duties; secondly, that they may be enabled to export freely the value of their products admitting of only a limited consumption at home.

In reference to the restrictions on the importation of American cattle, the *Detroit Post and Tribune* says:—So far as the cattle of the west are concerned there is believed to be no cause for alarm. They are entirely free from the disease, and an effort is being made by the Grand Trunk Railway to procure an exemption from the order for western cattle shipped through Canadian ports. The Canadian government have promised to use their influence with the home government to accomplish this result, provided the authorities on the western frontier adopt rigid regulations of inspection and take decisive steps to guard against the contagion. At present cattle are not allowed to be shipped through Canada, but all cattle going east from this point are sent by the South Shore line.

A well-informed drover of long experience said that the recent British order was well understood by drovers generally, but they said very little about it. He thought it would injure the trade to some extent, but not seriously. If the delay at quarantine proved vexatious and expensive, the trade would take the shape of dressed meat. This makes a difference of about 5 dols. per head. Dressed meat does not sell as well as meat on foot, but the trade would go on.

Our Canadian correspondent writes under date of Feb. 25.—The *Toronto Telegram* announces that the Dominion Government (which must be carefully distinguished from the Ontario Provincial Administration) will immediately call in all outside emigration agents, and put the useless and extravagant London office on a new and no doubt more economical footing. The subject of emigration is of immense importance both to England and the Colonies; but in England its importance has never been adequately appreciated; hence every idle *ex cathedra* assertion by interested persons has long been accepted without investigation; great industries have been deranged, and thousands of people doomed to suffering and disappointment. I hope next week to offer some remarks on the action of the Dominion Government above noticed. At present I will merely say that the policy of Sir John Macdonald and his colleagues will, I believe, be the entire opposite of the immigration vagaries of the late administration, and eminently satisfactory to both the Canadian and English people. The halcyon days of the professional immigration promoters here are gone for good. They have made hay in glorious style, while the Mackenzie sun shone, but that luminary has gone below the horizon, and common sense—to say nothing of common honesty—in immigration matters will be the *role* of the new *régime*. The Farmers' Club of South Ontario have been in session at Oshawa over their various ailments. The proceedings were somewhat amusingly "mixed." The general feeling seemed to be that the Canadian agriculturist is in poor case, and badly wants something done for him. But few speakers seemed in harmony on the nature of the prescription. Some thought protection was the true sovereign restorer, others could not see their way to that specific. A good deal of time was consumed over the old conundrum, "Who pays protective duties, the consumer or the exporter?" But the solution of the problem was left *en demi-jour*. What the Canadian farmer thinks of the great cattle export business, which certain cute entities here would have people—especially on your side of the water—believe is a matter in which he takes special interest, was incidentally shown in the contemptuous allusions of one or two

speakers. For instance, Mr. Annis delivered himself as follows:—"There is a great quantity of oats brought into Canada (from the States), but as soon as we talk of putting a duty on them, up jump the lumbermen. Of corn we bring in 8,000,000 bushels, but if we talk of protecting our coarse grains by putting a duty on corn, we offend the distillers, *who say they will not be able to get their beautiful swill with which they feed American cattle.*" Another farmer, Mr. Mothersill, remarked:—"We have a grievance in the live stock trade. Shippers of cattle import American steers, and bond them and sell them in Canada if they can find a market which suits them. If not, they run them out at the other end to the Eastern States. No sooner does the price rise a cent, or two, than the American cattle are taken off the trains, and down goes the price. As for Western pork, the hogs are fed upon the undigested part of corn which has already passed through the bodies of cattle!" The fact is, the farmers here are swamped with Jonathan's cheap oats, corn, flour, pork, cattle, and in short, nearly everything except barley. The big lumbermen and distillers won't hear of protective duties, as the one class want cheap American oats, and the other cheap Indian corn, to make rye (?) whisky and fatten cattle, sheep, and pigs on their "beautiful" swill for the English and Canadian markets. And, amid all this, sundry knowing folk here are trying to persuade people on your side that this is a great cattle-exporting country, with hundreds of thousands of native beasts stall-feeding for export. If the farmers had their will, the British and Canadian embargo on American cattle would be continued till doomsday. The railway companies and the cattle speculators are, with the shipowners, the real "interests" involved. The Grand Trunk manager is now pressing the Dominion Government to rescind the prohibition-order so far as the "Western States" are concerned. A partial embargo of that sort is, however, obviously surrounded with many difficulties. Even should the Canadian Government admit beefs from the Western States it is not at all probable the British authorities would run the risk of letting them be imported *via* Canadian ports, merely because they were owned and shipped by Toronto firms. As everybody must see there is no sufficient proof that the disease in the *Ontario's* cargo began among American cattle. The Toronto dealers assume and say the diseased animals were the "American" ones, but they were not on the spot; and if they had been, in a mixed cargo like that under notice it would be mere guess-work to distinguish the "nationality" of the respective animals. This being the case, though there be no disease among the cattle of the Western States at present, yet, as Professor MacEachren, the Dominion expert, said in a lecture at Montreal, a few days ago, there is "a strong probability that they may become tainted during transmission." The professor further observed that if the American Government thought such a disease as pleuro-pneumonia could be done away by any half-measures, they were greatly mistaken; nor would the British Government be satisfied with half-measures. The latest phase of the business, according to the *Mail*, is that the Dominion Government has promised the Grand Trunk officials to use its influence with the English Privy Council to permit the shipment to England of Western cattle through Canadian ports, under proper precautions by the United States authorities. It must strike your readers as extraordinary that the Grand Trunk should be so much exercised *re* Western cattle exports, seeing that Canada should, as things now stand, have a monopoly of the English trade, and with "200,000 beeves" now feeding in stalls, be able to draw a roaring business free from American competition. There is no way this enormous number of native animals can go from Montreal and Quebec when navigation opens, save by the Grand Trunk, whose resources, indeed, would be severely

taxed to carry only a part of them. The interests of that railway therefore cannot suffer; that is, if the 200,000 beasts really existed. Consequently the commotion among the forwarders, and the efforts they are making to have American cattle from the West excluded from the Canadian and British embargoes, impels inevitably to the conclusion that the existence of the aforesaid Canadian beeves is known to be one of those pleasant fictions which often do duty in these quarters; and that American cattle are sought for so solicitously because they are, in effect, the only source of supply worth considering, in an export view, from Canadian ports.

### AGRICULTURAL PRODUCTION.

The following letter from Mr. J. J. Mechi was read at a recent meeting of the Manchester Chamber of Commerce:—"Seeing, that with 47,000,000 of farmed acres and much waste land, our 33,000,000 of population are dependent on foreign supplies for one-half of their food, we must come to the humiliating conclusion that British agriculture has not progressed with our other industries, being still in a very undeveloped and imperfect condition. If we ask why this is so, the reply must be "because it is in ownership, occupation, and transfer, bound by antiquated fetters," while manufactures, trade, and commerce have been set free. The consequence is that our land produces less than one-half what it might do under altered and improved conditions. Insecurity of tenure, dictative and restrictive conditions of tenure, and the absence of leases and valuations of unexhausted investments have prevented that inflow of capital which must necessarily accompany increased production. My long experience has taught me that our general produce may be more than doubled by a more than doubled tenant capital, and that the landlord's investment in improvements must be concurrent in the matter of drainage, buildings, re-arrangement of fields, &c. The tenant should have freedom to conduct his business as he thinks best for his interest, just as manufacturers are free to do. The tenant capital invested is estimated (for the United Kingdom) at less than £8 per acre; it should be £15 to £20, as it is in some well farmed districts. The landowner's capital is only £30 per acre; that should be also considerably increased. Then the return in food produced would be in proportion. Lord Derby admitted that the produce might be doubled, but he omitted to say that the landowner's and tenant's capital must also be proportionately increased. Agriculture is, as compared with manufactures, only in the eighteenth century instead of in the nineteenth. Our non-agricultural population have also a great responsibility in the matter of food production. They should, in one respect, follow the wise example of the Chinese, who return to the soil that which they have received from it. If this were done, our enormous imports of foreign food would greatly add to the fertility of our soil, and thus increase its produce. Manchester should feel ashamed, for she has neglected her duty in this matter. Free trade in land and free action for its tenants would greatly add to the wealth and strength and happiness of our people.

**THE INCIDENCE OF AGRICULTURAL DEPRESSION.**—We must expect, therefore, a continued reduction of the price of agricultural produce, and a continual lessening or some time to come of the general profits of English farming. On which of the three classes among whom these profits are shared will the loss fall? That the labourers will take no part of it is tolerably obvious. If the cost of farm labour is reduced at all it must be by the use of machinery, and the employment of fewer and more skilful hands at higher wages. Nor do we think that the farmers will submit to bear the loss. They may cling to their craft more obstinately than other unsuccessful producers; but already their profits are below the average. The difference, no doubt, is made up by the superior pleasantness of their occupation and the advantages of a rural life. But such compensations have already reduced the profits of this favoured occupation to what is probably their minimum. Those who accept ten per cent. where their competitors in less pleasant businesses make sixteen, or three where their equals receive six, have made all the sacrifice to their taste that they can well afford. There remains but one sharer in agricultural profits upon whom the loss can fall. The landlord must be the ultimate sufferer.—*Stanford.*

## CARBOLIZED OIL FOR EWES IN LAMBING.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—Since my letter appeared in your own and other papers I have received so many inquiries as to the carbolized oil, which I regret, for want of time being unable to answer, and I hope you may be induced to print the matter I send herewith, which will assist those persons who ask for some information as to the strength of the mixture and directions for its use. I trust, also, that those persons whose letters I have not answered will kindly excuse my giving the information they seek through your own and other papers, which will relieve me of much writing, and the information may be of some use to flock-masters generally.

I have proved that from its extra purity and ready solubility Calvert's No. 4 carbolic acid may be fully relied upon, and I, therefore, recommend it in preference to any other kind that I have tried. To one part of acid add seven parts of Gallipoli oil. Great care should be taken to have the acid and oil well and properly mixed, and also that it be thoroughly shaken before pouring it from the bottle for use. It is advisable to use some of the mixture when there has been a case of difficult or bad lambing to the exterior of, and syringe some into, the vagina. When there is *any* fear of inflammation of the uterus half a wine glass full at the least of the mixture should be syringed into the uterus. *I very much* prefer the use of a proper syringe to endeavouring to get the mixture into the uterus by pouring some into the vagina, and lifting the hinder part of the ewe. Suitable lead syringes may be obtained at from one shilling each. It is advisable to use the mixture about new milk warm, and it may be applied every six or eight hours, but more frequently in extreme cases.

Great care should be taken that shepherds after dressing a ewe affected with straining, should not attend upon another ewe until they have *thoroughly washed their hands* in water, with which some carbolic acid may be mixed with advantage. I may perhaps be allowed to observe that as my business engagements induce me to ask you to kindly print this letter, with a view to saving me much correspondence, I wish it to be understood that if any flockmaster requires further information than the letters which have appeared in your own and other journals convey, I shall be glad to render them any assistance that lies in my power. Since my letter of the 24th ult. there has still been no case of straining amongst the ewes in the Merton flock. There is a flock of 300 cross-bred ewes on a farm in hand, at some distance from Merton, of which ewes seventy have lambed single and over sixty twin lambs with the death of only one ewe since the lambing commenced, which the bailiff ordered to be slaughtered after saving her two lambs. I give the above numbers because it is worthy of notice that there has not yet been a single case of straining after lambing, a circumstance which the shepherd says he never knew to happen before in all his experience, during a period of forty years. He, like the Merton shepherd, has used the carbolized oil freely whenever he has found anything like difficult lambing. He syringes some of the mixture along the interior of the vagina, and also applies it to the exterior. He is also careful to apply it to his hands whenever he has to give assistance to a ewe.—I am, Sir, &c.,

HENRY WOODS.

Merton Estate Office, Thetford, March 8th.

**VOLUNTARY REDUCTION.**—In consideration of the depressed state of agriculture, Mr. George Keith, of Usan, near Montrose, has agreed to give his tenantry not only a considerable reduction in rent payable under old and unexpired leases, but also to free them from all restrictions as to rotation of crops.

## THE MARTYR'S MEMORIAL.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I had no idea when I recently read your remarks upon "The Inn of the Abbots of Cirencester," that the Monastery at Cirencester was likely to be so soon revealed in all its peculiarities. It appears that the Committee of Management of the Cirencester College has given its support to the views of the Principal, and thereby practically decided that Professor Church cannot continue to hold his Professorship unless he continues to reside in the College. His retirement from the College consequent upon his marriage is the reward with which his devoted services of sixteen years have been acknowledged. How those duties have been discharged is a matter upon which we do not ask for any opinion, the students who have passed through that College know full well, and the outside world has formed its opinion also.

But I am glad to know that he will not retire alone, for the unfair treatment to Professor Church receives a practical protest by the resignation of Professor Tanner, who holds the chair of Mathematics and Physics—a well-known Oxford double-first, and Professor Fream, who holds the chair of Geology and Botany, a man of recognised ability.

These three men may now be added to that glorious roll of martyrs which already carries the elsewhere honoured names of Voelcker, Coleman, Buckman, Brown, Wrightson, and Sheldon.

A Martyr's Memorial must be forthwith commenced, and I hope it will take the form of an educational institution which shall thoroughly meet the requirements of the sons of the aristocracy, and also provide for the sons of tenant farmers. England must no longer be dependant for its higher class instruction in Agricultural Science upon an institution which, although it was built by the contributions from those interested in agriculture, and was intended to meet their wants, has not done for some years past a tithe of the public good of which it has been capable.

I regret to say so, for I love the old College; but there is a limit to all human forbearance, even from,

A MEMBER OF THE ROYAL AGRICULTURAL COLLEGE.

**FARMERS' GRUMBLING.**—"No," the honest farmer remarked, in tones of deepest dejection, "the big crops don't do us a bit of good. What's the use? Corn only thirty cents. Everything is dead set against the farmer. Only thirty cents for corn! Why, by gum, it won't pay our taxes, let alone buying our clothes. It won't buy us enough salt to put up a barrel of pork. Corn only thirty cents! By socks, it's a livin' cold-blooded swindle on the farmer, that's what it is. It ain't worth raisin' corn for such a price as that. It's a mean, low robbery." Within the next ten days that man had sold so much more of his corn than he had intended that he found he had to buy corn to feed through the winter with The prize nearly knocked him down. "What," he yelled, "thirty cents for corn! Land alive—thirty cents! What are you giving us? Why, I don't want to buy your farm, I only want some corn. Why, I believe there's nobody left in this world but a set of graspin', blood-suckin' old misers. Why, good land, you don't want to buy a national bank with one corn crop! Thirty cents for corn! Well, I'll let my cattle and horses feed on cornstalks all winter before I'll pay such an unheard of outrageous price for corn as that. Why, the country's flooded with corn, and thirty cents a bushel is a blamed robbery, an' I don't see how any man, lookin' at the crop we've had, can have the face to ask such a price."—*Burlington Hawkeys.*

# Agricultural Societies.

## ROYAL OF ENGLAND.

The following is the List of new Members, unavoidably omitted:—

Adlington, Henry S., of Holm Hale Hall, Shipdham Norfolk.

Alcock, John, of Pulford, Wrexham.

Altons, John, of Tivetshall, St. Mary, Scole.

Anderson, Wm., of Houghton, Carlisle.

Andrews, Abraham S., of Webb Lodge, Clay-street, Waltham-atow.

Ash, Frederick J., of Chadwell, St. Mary's, Grays, Essex.

Ashforth, Joseph, of Bruce Works, Sheffield.

Asplin, Francis, of St. Clera's, East Tilbury, Romford.

Bagshaw, George, of Norwich.

Bailey, Walter J., of East Lexham, Swaffham.

Baker, Robert Sammers, of North Walsham, Norfolk.

Banks, William, of 4, John-street, Bedford-row, W.C.

Barcham, Thomas, of The Limes, Paston, North Walsham.

Baring, Thomas Charles, M.P., of High Beach, Loughton, Essex.

Barker, Philip C., of Ingatestone, Essex.

Barnard, John K., of Harlow Mills, Harlow, Essex.

Barnes, John S., of The Casino, Colchester.

Barnes Samuel, of Surlingham, Norwich.

Barrow, John, of Rock House, Barrow-in-Furness, Derby.

Barwell, John, of Hoveton Hall, Nantwich.

Bates, Charles, of Dagenham, Romford.

Bawtree, Octavius, of West Lodge, Colchester.

Beanes, Edward, of Moatlands, Paddock Wood, Brenchley.

Beauchamp, Sir Reginald P., Bart., of Langley Park, Norwich.

Beck, Frederick W., of Mileham, Swaffham.

Bell, Francis, of Heath Cottage, Norwich.

Belli, Rev. Charles A., of South Weald, Brentwood.

Berham, John, of Southport.

Betta, Thomas, of Wisfarthing, Diss.

Biddell, George, of Orsett, Romford.

Bircham, William, of The Ollands, Beccles.

Blawitt, Edward R., of Rainham, Romford.

Bolton, John S., of Oulton, Aylsham.

Bonchier, Major, of Felthorpe Hall, Norwich.

Bradburn, Thomas, of Wednesfield, Wolverhampton.

Bremridge, John London, of Martin Farm, Whiddon Down, Oxshington.

Brise, A. W. Ruggles, of Danvers, Witham.

Bristol, Marquis of, of Ickworth, Bury St. Edmunds.

Brown, William, of Haydon Hall, Norwich.

Brown, Henry, jun., of the Grange, Red Hill.

Bunyard, Harry, of 64 Tooley Street, S.E.

Barrell, Charles, jun., of The Shrublands, Thetford.

Bart, George, of Parbeck House, Swanage, Wareham.

Barton, John P. M., of Taverham Rectory, Norwich.

Batler, Thomas, of Spixworth Park, Norwich.

Buxton, Samuel Gurney, of Catten Hall, Norwich.

Byles, Robert, of Newton Plotman, Long Stratton.

Campion, Frederick, of "Frenches," Red Hill.

Cast, G. H., of Mile End, Colchester.

Canterbury, Viscount, of Wicheingham Hall, Norwich.

Carter, George R., of the Manchester and Salford Bank, Bolton-le-Moors.

Caton, Horatio, W., of Romford.

Chap, L. C., of Hawkhill, Alnwick.

Christie, George Henry, of Framlingham Manor House, Norwich.

Christy, David, of Patching Hall, Chelmsford.

Clarke, Stephenson, of Croydon Lodge, Croydon.

Clarke, William R., of Wymondham.

Cole, Philip, of East Horndon, Brentwood.

Conger, Edward, of Elmhurst, Romford.

Cook, Henry, of Sasex Farm, Burnham, Westgate, King's Lynn.

Cowell, John R., of Ashdon, Linton.

Cowley, T. M., of Breadsall, Derbyshire.

Craig, Findlater, of Timsbury, Bath.

Cry, of Barling, Rochford.

Cry, of West terrace, Colchester.

Crush, A. W., of Mountnessing Hall, Brentwood.

Cubitt, William, of Bacton Abbey, North Walsham.

Cusson, David, of Cornforth, Ferry Hill.

Cutts, John, of Little Bardfield Hall, Braintree.

Delf, Captain Wm., of Walton-on-the-Naze.

Disney, Edgar, of The Hyde, Ingelstone.

Du Cane, Sir Charles, Bart., of Braxted Park, Witham.

Edwards, George Frederick, of Hall Farm, Marlingford.

Edwards, Henry W., of Hardingham Hall, Attleborough.

Edwards, Thomas Henry, of Keswick, Norwich.

Elliott, J. S., of Holme Lacy, Hereford.

Everitt, Percival, of Ryburgh, Fakenham.

Ewing, John Edward, of Eaton, Norwich.

Ffolkes, Sir W. H. B., Bart., of Hillington Hall, Lynn.

Finch Hatton, Hon. Murray Edward, of Heaverholme, Slenford.

Fitch, Edward A. of Brick House, Ayton, Essex.

Flower, Edgar, of The Hill, Stratford-on-Avon.

Foster, Sir William, Bart., of Hardingham, Attleborough.

Fowler, Ernest W., of Gauston Old Hall, Lowestoft.

Gepp, Thomas Morgan, of Chelmsford.

Giblett, John, of 2, Glebe Place, Stoke Newington, London, N.

Gibson, Robert, of Ellerbeck, Penrith.

Gilbert, Cecil T. C., of Strumpshaw Hall, Norwich.

Gilbert, Edward, of Blofield, Norfolk.

Gilbert, H. C. B., of Braydestone Hall, Blofield, Norfolk.

Gilders, George, of Manor Farm, Great Hockley, Colchester.

Gingell, George, High Laver Hall, Ongar.

Glenny, Thomas W., of Lion's Road, Barking.

Golden, John, of Ramsey, Hunts.

Goodman, James, F., of Staverton, Daventry.

Griffin, Charles, of Feltwell, Brandon.

Hallum, Thomas G., of Wormingford, Colchester.

Hansell, P. E., of Thorpe, Norwich.

Harrison, Edward, of Spoor, Swaffham.

Harter, Percival L. T., of 4, Park Street, Lytham, Lanc.

Hastings, John, of Longham Hall, East Dereham.

Hay, Charles E., of Bradford House, Belford, Northd.

Hempson, A., of Ramsey, Harwich.

Henniker, Sir Brydges, Bart., of Newton Hall, Danmow.

Heppell, Thomas, of Leafeld House, Birtley, Chester-le-Street.

Hill, John, of 17, West Smithfield, London, E.C.

Hilliard, George B., of Chelmsford.

Hobbs, Captain Simpson H., of Hill fields, Bewdley.

Holmes, Benjamin, of Hornechurch, Essex.

Holmes, J., Sanicroft, of Gaudy Hall, Harleston.

Hosley, William Seymour, of Audley End, Saffron Walden.

Howard, Colonel L., of Goldings, Loughton, Essex.

Hudson, G., of Blakeney, East Dereham.

Jex, Henry, of Aldeby, Beccles.

Jillings, William G., of Bridgham, Thetford, Norfolk.

Johnson, Samuel, of Lawford, Manningtree.

Kemp, Sir Kenneth H., Bart., of Gissing Hall, Diss.

Kimber, Thomas, of Burfield Hall, Wymondham.

Knight, Feraley, of Castle Rising, King's Lynn.

Knight, Thomas, of Cauldwell, Barton-on-Trent.

Lambert, Thomas W., of Castle Farm, Ongar.

Lee, William John, of "Pigtails," Romford.

Leeds, Charles Stephen, of Tattersett, Fakenham.

Ling, Edmund, of Hempstead Hall, Holt, East Dereham.

McCreath, William, of Girvan, Ayrshire.

Mack, T., of Bacton, North Walsham.

Magnum, Frederick Arthur, of Drayton, Norwich.

Mann, Thomas, of Thell Hall, Scole.

Marshall, C. R., of Stratton Strawless Hall, Norwich.

Matthews, Thomas, of Plasket House, East Ham, Essex.

Meats, Albert, of Pyon Villa, Gloucester.

Micklethwaite, George N., of C

Mildred, Henry, of Warley H

Monk, Thomas, of The Slopes,

Mott, J. Stanley, of Barnagh

Mulvaney, John, of "Essex"

Murray, Geo. Wilson, of Bai

Neve, Charles Le, of Marsha

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Old

On

Page, Mark, of Newbold Grounds, Daventry.  
 Parmeter, Francis, of Booton, Norwich.  
 Parsons, William, of West Stratton, Micheldever.  
 Partridge, W. P., of Elmstead Hall, Colechester.  
 Patch Thomas, of Faircross, Barkins.  
 Paterson, Henry S., of Cringleford, Norwich.  
 Pateson, Henry T. S., of Cringleford, Norwich.  
 Pearce, John B., of Sarrey Street, Norwich.  
 Pearson, William, of 20, Mellor's Buildings, Liverpool.  
 Peachey, William, of Thetford.  
 Pemberton, Robert, of Hare Hall, Romford.  
 Pidgion, Jonathan S., of Warley Elms, Brentwood.  
 Postifer, Arthur, of Brasingham Hall, Diss.  
 Portway, Charles, of Halstead, Essex.  
 Postle, John Seaman, of Smaborough, Norwich.  
 Postle, Wm. Seaman, of Smaborough Hall, Norwich.  
 Prentice, Eastace C., of Woodfield, Stowmarket.  
 Preston, Sir Jacob H., Bart, of Beeston Hall, Neatishead  
 Norwich.

Reeve, Charles, of Snetterton Hall, Thetford.  
 Reeve, Simon, of Norwich.  
 Riving, Robert C., of Oxnead Hall, Norwich.  
 Rising, Thomas, of Rollesby, Great Yarmouth.  
 Rodger, George, of Arden House, Altrincham.  
 Rogers, John F., of Swanington, Norwich.  
 Rolt, Mrs. S., of Oxleworth, Wotton-under-Eggle.  
 Roydon, John, of Havering Park Farm, Romford.  
 Sainsbury, Edward, of Messrs. J. Gibbs and Co.'s Chemical  
 Works, Victoria Docks, E.  
 Sandon, Edward Foster, of Wellington Foundry, Lincoln.  
 Sharman, Peter J., of Scarning, East Dereham.  
 Simons, Rev. Charles Walker, M.A., of Saintbury Broadway,  
 Worcestershire.

Slater, John, of Stansfield, Clara, Suffolk.  
 Smith, Frederic, of Elmhurst, Stratford Green, E.  
 Smith, Henry James, of Hall House Farm, Ledbury.  
 Smith, Thomas, of Killinghall, Ripley, Yorks.  
 Sparke, Edward B., of Gunthorpe Hall, East Dereham.  
 Spurrell, Daniel, of Beasingham, Norwich.  
 Steadman, John B., of East Reedham, Swaffham.  
 Stoughton, Clarke, of Bawdeswell, East Dereham.  
 Stracey, Edward H. G., of Thorpe, Norwich.  
 Sudbury, James, of Cantley, Norwich.  
 Tankerville, Earl of, of Chillingham Castle, Alawick.  
 Taylor, Henry, of Market Place, Romford.  
 Taylor, Vere W., of Hedingham, Halstead.  
 Taylor, Francis, of Diss.  
 Thompson, Richard H., of Broughton, Preston.  
 Thursby, Rev. William F., of Burgh-Apton Rectory, Norwich.  
 Tice, Richard, Barford, Wymondham.  
 Tinsley, George, of Egner, Walsingham.  
 Tidball, Alfred, of Melbury Road, Kensington.  
 Tompkins, John, of Aveley Hall, Romford.  
 Tufnell, John Jolliffe, of Longley, Chelmsford.  
 Upson, James, of Rivenhall, Witham.  
 Walker, Henry, of Sellsfield, Caraforth.  
 Wareing, John, of Berry Fields Farm, Braunstone, Daventry.  
 Waters, Charles, of Postwick, Norwich.  
 Waters, Horace M., of Manor House, Bittering, East Dere-  
 ham.  
 Watson, Joseph Yelloly, of The Grange, Thorpe-le-soken, Col-  
 chester.  
 Wedlake, Thomas William, of Hornechurch, Romford.  
 Williams, Charles H., of Pitton House, Barnstable.  
 Williams, Oliver John, of Dovercourt, Harwich.  
 Wiseman, James F. T., of The Chase, Paglesham, Rochford.  
 Wolfe, Edward Alfred, of Monaxton, Andover.  
 Woodthorpe, Edward, of Grayshott, Liphook.  
 Wood, John, of Langford Hall, Maldon.  
 Wortley, Robert, of Suffield, Aylsham.  
 Wotherspoon, J., of Hethel Wood, Wymondham.  
 Wragg, John, of Takeley, Chelmsford.  
 Youngman, Benjamin, of Elms Farm, Walthamstow.  
 Ziegler, George William, of Landican, Birkenhead.

## NORFOLK.

The second annual Spring Show of agricultural, thor-  
 oughbred, and hackney stallions, under the auspices of the  
 Norfolk Agricultural Association, was held on the Chapel

Field, Norwich, on March 8th. The total amount of  
 prizes awarded was £310, and the number of entries was  
 54. One of the conditions was that the eleven prize win-  
 ners must be exhibited at the Summer Show at East  
 Dereham, on the 11th and 12th of June next. The fol-  
 lowing were the principal prize takers:—

**AGRICULTURAL STALLIONS.**—Best agricultural stallion,  
 four years old and upwards, £20, with £60 special prize added,  
 Mr. Charles Marsters, Saddlebow, King's Lynn, Topman,  
 chestnut; 2nd, £10, Mr. Thomas D. Taylor, Earsham Park,  
 Bungay, Young Marksmen, chestnut; 3rd, £5, The Stand Stud  
 Company, Stand, Whitefield, Manchester, Young Champion,  
 chestnut. Best agricultural stallion, three years old, £12, with  
 £40 special prize added, Mr. Garrett Taylor, Trowse House,  
 Norwich, Norfolk Wonder, black, with white points; 2nd, £8,  
 Mr. George Body, Haverland, Norwich, Hercules, blue roan.

**THOROUGHBRED STALLIONS.**—Best thoroughbred stallion,  
 calculated to get hunters, £25, with £25 special prize added  
 by Anthony Hammond, Esq., and the members of the West  
 Norfolk Fox Hunt, thus making the prize £50, Sir Reginald  
 Beauchamp, Bart., Langley Park, Norwich, Zanzibar, brown.  
 C., Mr. Henry Jones, Littleport, Lydon, black brown.

**HACKNEY AND RIDING STALLIONS.**—Best stallion, not  
 under four years, suitable for getting hackneys, for saddle or  
 harness, £15, with £37 10s. special prize added, thus making  
 the first prize £52 10s. Mr. James Playford Coker, Beestley  
 Hall, East Dereham, Norfolk, High Flyer, brown; second,  
 £10, Mr. John Youngman, Wicklewood, Wymondham,  
 Norfolk Cob, black; third, £5, Mr. James Griggs, South  
 Creake, Norfolk, Model the Second, chestnut. Best stallion  
 under four years old, £12, with £18 special prize added, thus  
 making the first prize £30, Mr. John William Huns, Hun-  
 stanton, Lynn, National Guard, roan; second, £8, Mr.  
 George Jones, Stowbridge, Downham, Lord Beaconsfield.

## KINGSCOTE.

The last meeting of this Association of the season was held  
 at Kingscote, on March 7th, when Mr. G. Blackwell, of  
 Haylecote, Kingscote, read a paper on "a remedy for the  
 present agricultural depression," his remedy apparently being  
 protection: There was a long discussion.

## Farmers' Clubs.

### IXWORTH.

A meeting of this Club was held at Ixworth on March  
 10th, Admiral Horton in the chair. The Rev. C. W. Jones  
 read a paper on "Kindness to Animals," in the course of which  
 he earnestly pleaded for kindness and thoughtfulness towards  
 the animals of the farm. With respect to dogs, he was glad  
 to say that they have been to a large extent delivered from tail  
 and ear cropping, which is both barbarous and disfiguring;  
 but they suffer a good deal from bullying and thoughtlessness,  
 such thoughtlessness, for instance, as consists in keeping them  
 constantly tied up, in not allowing them enough water, and  
 sometimes in combining these two species of thoughtlessness.

In conclusion, he moved:—"That the Royal Society for  
 the Prevention of Cruelty to Animals is deserving of our  
 material and moral support."

Mr. MALLOWS, while fully agreeing with what was said as  
 to the need of preventing cruelty to animals, said that when  
 the animals had been protected he hoped some sort of society  
 would be formed for the purpose of protecting tenant farmers  
 from the cruelties and oppression practised upon them. Let  
 tenant farmers be the next kind of animal protected. He need  
 not mention what these cruelties were, for they were well-  
 known to all present.

Mr. MANYFIELD complained of the Society for unnecessary  
 interference in some cases, and for neglect in more serious  
 instances of cruelty, and asked what was more cruel than the  
 traps for catching vermin.

Mr. R. GREEN looked upon many of the prosecutions of  
 the Society as absurd, and referred to the cruel custom of  
 labourers in charge of teams. The horses, reeking with-  
 perspiration, would be left standing for hours outside a pub-  
 lishouse, and would then be driven furiously home to make up  
 for lost time. Such cases ought to be stopped.

The resolution was passed.

# Chambers of Agriculture.

## CENTRAL.

The monthly meeting of the Council was held on March 4th, at the Society of Arts, John Street, Adelphi, the Marquis of Huntly, President for the year, occupying the chair.

After the usual preliminaries—

The SECRETARY (Mr. J. A. Clarke) read a communication from the East Kent Chamber, urging the Central Chamber to draft a Bill on the law of distress in accordance with the views expressed at the last Council meeting.

Mr. C. S. READ, M.P., said he was quite sure that the members for East Kent were competent to prepare a Bill on the subject, and introduce it in Parliament, and he thought they should be asked to do so instead of the Council (Hear hear). The hon. gentleman concluded with a motion to this effect.

Mr. CALDECOTT seconded the motion, and it was agreed to.

The SECRETARY then read a communication from the Lincolnshire Chamber, stating that the following resolution was passed by it on Friday last: "That in the opinion of this meeting it is the duty of the Government, in the general depressed state of trade, and especially of agriculture, to reduce some of the Imperial taxes, and to readjust the present incidence of local rating, and that with this object, and taking into consideration the prohibitory and protective duties levied by other nations, it is expedient that a registration duty should be imposed on corn and stock imported from foreign countries."

The following resolution had been forwarded from the West Riding Chamber: "That this Chamber requests that the Central Chamber will take into consideration the present depressed state of agriculture, with a view of petitioning Parliament that a committee may be appointed to inquire into the causes of it."

Mr. H. NEILD said although he sympathised with the object of the communication from the Lincolnshire Chamber, he thought it ought not to be entertained.

The CHAIRMAN observed that perhaps the best thing they could do was merely to acknowledge the receipt of it (Hear, hear).

This suggestion was adopted by the meeting.

The following Report of the Business Committee on the vacant secretaryship (Mr. Clarke having announced his resignation at the last meeting) was then presented:—

"Your committee recommend that the secretary should reside in London, that he should undertake the various duties of a secretary, and be subject in all things to the order of the Council. Your committee recommend that the salary should be £150 per annum. Your committee, having carefully considered the applications of twenty-seven candidates, have selected the following four gentlemen for nomination: Captain P. G. Craigie, Secretary of the Local Taxation Committee; Mr. J. A. Hattersley, of Shobdon Court, Shobdon, Herefordshire; Mr. Septimus P. Skipworth, of Rothwell, Caistor, Lincolnshire; Mr. Thomas Wilson, of Knaptoft House, Oundle, Auditor of the Central Chamber."

The applications and testimonials of the four selected candidates having been read by the Secretary, the Chairman proceeded to take a show of hands on the names in the order in which they stand in the list, the result being as follows: Captain Craigie 34, Mr. Hattersley 1, Mr. Skipworth 4, Mr. Wilson 14. The names were then put separately in succession, the lowest being struck off each time; and the result was that Captain Craigie was elected by 33 votes, the next in order being Mr. Wilson, who obtained 9 votes.

The TREASURER (Mr. Clay) expressed the opinion that the expenses of printing, stationery, reporting, postage stamps, &c., had hitherto been excessive, amounting altogether to about £100 a year, and moved that the matter should be taken into consideration by the Business Committee with a view to reductions.

The motion was seconded by Mr. ADKINS, and agreed to.

Professor WILLIS BUND said he wished to propose a vote of thanks to their late secretary (Cheers). That gentleman served them so well, and for so many years, that the least

they could do was to give him their heartiest thanks, and to express a hope that in the new vocation, the acceptance of which had compelled him to leave them, he would have complete success (Cheers).

Mr. P. PERPES, M.P., in complimentary terms, seconded the motion, and it was carried unanimously.

Mr. J. A. CLARKE said: My lord and gentlemen, I am exceedingly grateful to you for the very kind expressions you have just given of your satisfaction with what I have done, or endeavoured to do, during the twelve years I have spent in your service. I hope the career of the Central Chamber will be one of expansion, and of much greater progress than has been made in the past, and that at the end of the next twelve years the secretary will be able to give a far better report than I am able to present at the present moment of the number of members and the state of the subscriptions. I thank you, gentlemen, very heartily for this kind expression of your feelings, and I leave you with very great regret (Cheers).

Mr. PELL, M.P., as Chairman, presided on the part of the Local Taxation Committee.

Mr. PELL having moved "That the Report now read be received," the motion was seconded and carried.

The next business being to consider "What steps shall be taken by the Council with regard to the Valuation Bill,"

Mr. JABEZ TURNER said it had been his lot on previous occasions to bring before that Council the provisions of Bills which affected valuation, and he could not, as a member of the Business Committee, allow that opportunity to pass without saying a few words on the Bill which was then before Parliament, and which had passed the second reading without the agriculturists of England, who were so much interested in valuation matters generally, having had an opportunity of expressing their opinions upon it. There had been a considerable amount of difficulty experienced in obtaining copies of that Bill (Hear, hear), and it had been very imperfectly debated in the House of Commons, although it had passed the second reading (Hear, hear). He did think that a measure which so materially affected the interests of the occupiers of land and houses, and of the agriculturists of England, deserved, in its passage through the House of Commons, more attention than it appeared yet to have received; and he felt that it would not be right for the Council to allow it to pass without expressing an opinion on its merits or demerits. The Bill would no doubt make a very great difference in the principle and system of valuation. The functions of the Surveyor of Taxes were, indeed, rendered somewhat less objectionable than they were in the Bill of last year; but that gentleman still remained, and there could be no doubt that his functions would be exerted for the purpose, and with the inevitable result, of increasing the rateable value of all kinds of property. The principle advocated by many gentlemen in that Chamber, that rent should be the minimum of valuation, did not appear on the face of the Bill; but he questioned whether it did not exist in reality as much as it had done in previous Bills. The chief function of the Surveyor of Taxes was to prevent the Government at all events from losing any money by valuations; and when they knew what was shown by Capt. Craigie, who had gone carefully into the statistics, that Schedule A, as it at present stood, exceeded by something like £12,000,000 the gross value for the whole country, and that the assessment for income tax was taken from the gross value, they could not help feeling that the Surveyor of Taxes would endeavour to raise the assessments in the different parishes so as to make up the difference. Whether or not rent was to be the basis of valuation under the Bill he did not know, but he thought that the hard and fast line of rent was not a basis which they should seek to have established. The Local Taxation Committee had noticed the new proposal that the income tax should be taken upon the gross value of the assessment. At first sight that seemed to him a very extraordinary provision, but, upon reflection, he was inclined to think that it would not work prejudicially towards occupiers of land pure and simple. They ought to look very carefully at the amendments which were proposed in the Bill. He had observed one of a clever and taking character, which was proposed by a member for the City of London; but, considering whence it came, he regarded it with suspicion lest the chief object should be to benefit occupiers of houses. After calling attention to the fact that provision was made in the Bill for special valuations being made for railways, canals, &c., in each parish, and observing that in such cases the valu-

ations ought to apply to the whole Union, he concluded by moving the following:—"That this Council, although approving of the general principles of the Valuation Bill, regrets that it has not been preceded by a more comprehensive measure of county administration in which a greater amount of direct representation of the ratepayers is secured."

This resolution having been seconded,

Mr. C. S. READ, M.P., said it was astonishing to him that gentlemen should oppose the details of the Valuation Bill and not object to the principle. That principle was that rent should be the basis of valuation in one shape only, that is, rent as the minimum. The Government would not accept rent as the maximum; and the consequence would be that wherever the amount of rent was enough to please the Surveyor of Taxes he would take it as the basis of assessment, and when it was not enough to please him he would require something more. He should propose an amendment for the purpose of preventing persons from being assessed on an exorbitant rent. He did not like this basis of rent more than anyone else; but if that Bill was passed they must have rent pure and simple, otherwise it would raise the assessments very considerably and impose more rates and taxes on real property. It was very well to talk about having a uniform basis for local and imperial taxation, but the tendency of legislation was to extract the utmost farthing. The Government having discarded the valuation system of Ireland must, he contended, adopt the Scotch system of assessing on the basis of rating pure and simple. It appeared to him that the President of the Local Government Board was like the unfortunate widow in scripture; he insisted on putting the cart before the horse, what he ought to do being to secure the assistance of the local authorities in the first instance, and then come to details. The hon. gentleman concluded by suggesting that Mr. Turner's resolution should be amended by being made to commence as follows:—"But this Council regrets that the Valuation Bill of 1879 has not been preceded, &c.," omitting the words "approving of the general principles."

Mr. WALKER moved the following amendment: "That this meeting, recognising the justice of a right valuation of land, houses, &c., regrets that there is no valuation of that unseen but real wealth which is as much indebted for local burdens as land and houses."

This amendment fell to the ground for want of a seconder.

Professor WILLIS BUND said it appeared to him that the object of the Bill was to extend the principle of the Metropolitan Valuation Act to the country. Those who lived in the Metropolis knew that under the operation of that Act the valuation was increased every five years, and he looked upon that Bill as an instrument for screwing out of unfortunate occupiers, whether they were owners or tenants, every farthing that it was possible to make them pay. He looked upon the 26th Clause as an attempt to shelve the County Government Bill in such a manner that when Easter came they would be told, "You have got what you wanted in the Valuation Bill."

Mr. PELL, M.P., said, during the recent speech of the President of the Local Government Board, he was struck with the emphatic use of the word "If" in reference to the County Government Bill. The right hon. gentleman said "If that measure becomes law," &c. That "If" was rather alarming, and it created a suspicion in his mind, that the egg had hardly yet been laid from which the County Government Bill was to be hatched. Still, he thought they would stultify themselves if they did not insist that the Valuation Bill should be suspended till they saw what was going to be done with the other measure (Hear, hear.) He was satisfied with the operation of the Metropolitan Valuation Bill, and he did not think they could do better on the whole than accept rent as the measure of gross value. The provision made in the Bill for the special valuation of certain classes of hereditaments appeared to him perfectly monstrous and liable to great abuse.

After some further discussion, in which Mr. D. Long, Col. Brise, M.P., Mr. Glenny, and Mr. Whitaker Wilson took part, Captain Craigie entered the room, having been absent up to that time, and was received with cheers.

Mr. B. PELL, M.P., moved as an amendment "That this Chamber does not approve of the definition of gross value in the Bill, and is of opinion that rent should be substituted instead thereof, as is the case now in Scotland."

Mr. BELL said he wished to propose an amendment to the

effect that the Chancellor of the Exchequer should be requested to suspend the Valuation Bill until the County Government Bill has been passed.

Mr. DUCKHAM said he would second that, and described the Valuation Bill as "a piece of jumbled legislation."

Earl FORTESCUE deprecated the passing of such an amendment after the House of Commons had already negatived a proposal of the same kind.

The CHAIRMAN said he had suggested to Mr. Bell that he should move his resolution with the addition that if it were adopted, a copy of it should be sent to the Chancellor of the Exchequer.

Mr. BELL accordingly withdrew his amendment.

Mr. JABEZ TURNER, and his seconder, having accepted the amendment suggested by Mr. Read, the resolution was submitted in that form.

Mr. NEILD thought that something stronger should go forth from that Chamber.

Col. BRISE, M.P., said he had opposed all the Valuation Bills introduced since 1866, feeling quite satisfied with the existing assessment committees. He hoped the Council would do all it could to induce the Government to propose that rent should be the basis of valuation.

Mr. TURNER's resolution, as amended, having been passed from the chair and carried,

Mr. PELL proposed the motion which he had previously read respecting the definition in the Bill of gross value.

Mr. LIPSCOMB having seconded this proposal,

The CHAIRMAN said he had come to the conclusion that on the whole rent was the fairest basis of valuation. It was the basis in Scotland, and the case of all leases for 19 years; but in cases of improving leases of longer duration, assessors had to fix the value.

Mr. D. LONG protested against rent being taken as the basis in the present distressed state of agriculture.

Mr. GODBEZ said rent could, at the best, only be a partial basis. There was now quite a revolution in rents. A great deal of land which, a few years ago, was worth £2 an acre, would not now fetch 10s.

Mr. READ, M.P., said the question was whether rent was a just or an unjust basis of assessment, and he thought it was best they could have under that Bill (cheers). On the previous evening he had placed on the table of the House of Commons notice of an amendment to the effect that when land was let *bona fide* from year to year, without any fine or consideration, rent should be taken as the basis of gross value.

Mr. HODGES thought that rent, being an imperfect one, should not be the sole factor.

On the resolution being put, it was carried by a majority of four, the numbers being 19 against 15.

Mr. BELL then moved that a copy of the resolutions of the Chamber on the Valuation Bill should be forwarded to the Chancellor of the Exchequer, with a request that further progress should be suspended until after the passing of the County Government Bill.

The CHAIRMAN suggested that the latter part of the motion ought to be omitted, but Mr. Bell declined to accede.

Mr. D. LONG seconded the motion.

Mr. READ, M.P., said the majority on the last resolution was all very well; but what he should like to have was a resolution stating whether or not the Chamber approved of the definition of "gross rental" in the Government Bill. (A voice: "What is it?") That they should take the rent when it was high enough, and that when it was low it should be put as high as the Surveyor of Taxes might decide? If the Council approved of that he should feel astonished. Lord Fortescue had told them that the House of Commons had last year, by a large majority, expressed its disapproval of giving precedence to the County Government Bill over the Valuation Bill. Well, the "larger majority" was twenty-four. And how did that result come about?

He who fights and runs away,  
May live to fight another day.

He (Mr. Read) was in that position. He thought the Government had a very fair excuse in the month of July, if they wished to pass a Valuation Bill at all, for what they then did, and he knew that at that late period of the Session it would have been impossible to pass a County Government Bill. But now they had no excuse, and it was their duty to fall back upon the resolution of the House of Commons un-



animusly agreed to on the 9th of March, 1877, which declared that the County Government Bill was to be taken first. Therefore, he entirely approved of Mr. Bell's motion; and that evening he should lay on the table of the House of Commons a notice to this effect:—"On going into Committee on the Valuation Bill, to move as an amendment, that the introduction into the Valuation Bill of a provisional county authority is inconsistent with, and tends to nullify, the resolution of this House on the 9th of March, 1877, and that the further progress of this bill be suspended until the opinion of the House be taken on the promised bill relating to county government." (Cheers.)

The resolution proposed by Mr. Bell was put and carried unanimously.

The next business on the Agenda being the consideration of the Highways and Locomotives (Amendment) Act of 1878, Professor BUND moved the adoption of the Report of the Highways Committee presented to the Council at its February meeting.

Mr. LAWRENCE having seconded the motion, a long discussion ensued on the bye-laws, which the Committee suggested should be made by the county authorities under the above-mentioned Act for the regulation of traffic upon main roads and highways.

After some discussion,

Mr. LIFSCOMBE moved an amendment to the effect that the bye-laws were not such as to commend themselves to the Council.

Mr. SMYTHIES seconded the proposal, and ultimately it was carried by a majority of three to one.

Mr. W. STRATTON, as a member of the Committee, protested against such a decision after they had deliberated on the subject for months.

Mr. WHITAKER WILSON afterwards moved a resolution declaring that the Highways Act of 1878 was unsatisfactory in its working, and required amendment.

Mr. NEILD having seconded the motion, Mr. GLENNY, after remarking on the diminution in the number of members of the Council then remaining in the room, moved the previous question, which was negatived, the original motion being then carried by 9 to 3.

This terminated the proceedings, which occupied about four hours.

## CIRENCESTER.

At the monthly meeting of this Chamber, held on March 10th, after a resolution expressing sympathy with Professor Church on his retirement had been agreed to, Mr. Snowsall, read a paper on "Free Trade and the Depression," and concluded by moving the following resolution:—"That in the opinion of this Chamber the time has arrived when the Legislature of this country should seriously consider the causes of the present depression of the agricultural, manufacturing, and commercial interests, and affix such tariffs on foreign productions as will give to home producers a fair return for the capital employed." A long discussion ensued, which was ultimately adjourned.

## CORNWALL.

At the annual meeting of this Chamber, held in the Town Hall, St. Austell, the President, Mr. E. A. Magor, presided. On the proposition of Mr. Rouse, seconded by Mr. H. Pearce, Sir C. B. Graves Sawle was elected President for the ensuing year, in the place of Mr. E. A. Magor, whose term of office expired.

Sir Charles Sawle then assumed the chair, and briefly thanked the Chamber for the honour it had done him. He only hoped he should make as good a President as Mr. Magor had done.

In the place of the retiring Vice-Presidents, the following were elected:—Mr. J. K. Martyn, St. Ender; Sir John St. Aubyn, Barts., M.P.; Mr. C. Gurney, Launceston; and Mr. R. Foster, Lostwithiel.

## NOTTS.

At a meeting of the Council of this Chamber, held on March 5, Mr. G. Storer, M.P., took the chair, having been elected chairman for another year.

The Valuation Bill was discussed, and Mr. JOHN PARR moved "That this Chamber endorse and confirms the resolution of the Central Chamber of Agriculture, in laying down the principle that the actual rental should be the basis."

Mr. BEARDALL seconded the resolution.

Mr. GOBBER moved as an amendment, "That the Council approves of the clause as it stands in the bill, viz., that the gross value of an hereditament be the rent a tenant might be reasonably expected to pay."

After some further discussion, the CHAIRMAN put the amendment of Mr. Gobber, which was carried by nine votes to four.

## CIRENCESTER COLLEGE AND PROFESSOR CHURCH.

The following is a copy of the resolution which was passed by the Committee of Management of the Agricultural College, on the 5th of March, 1879, in reference to Professor Church's application for permission to reside out of the College:—

"The Committee of Management are of opinion that the discipline of the Agricultural College cannot be satisfactorily maintained except by the residence of Professors within the College walls in conformity with the original Bye Law No. 47. Being fully sensible of the services rendered by Professor Church during his sixteen years' residence in the College, they the more regret that they cannot accede to his recent proposal of non-residence, a compliance with it involving such alterations as would unduly disturb the present organization of the College Staff."

In consequence of this virtual dismissal of Professor Church, Professors Tanner and Fream have sent in their resignations.

At a meeting of the Cirencester Chamber of Agriculture on Monday last,

Mr. T. R. Hulbert said before the business began he desired to occupy a short space of time in moving a resolution. He believed it was the unanimous opinion of this Chamber that they were losing most valuable services in the resignation of their Professor of Chemistry, Professor Church (Hear, hear), and that they would desire to honour him on leaving them in some way or other (Loud applause). He was sure they all felt that Professor Church's departure would not only be a vast loss to the Agricultural College of Cirencester, but also a great loss to this Chamber (Renewed applause). The learned professor had rendered his services to the Chamber on the most advantageous terms for a long time past, and they should be at a loss to know how to replace him (Hear, hear), and he was sure they would all agree with him that they would like to back up their opinions by subscribing for him some testimonial, in a manner that would be agreeable to the professor's feelings, in order that he might have some token of remembrance of his many old friends in and around Cirencester (Cheers). He would not suggest what form their action should take, but he was sure they would all wish to be unanimous in what they did (Hear, hear). He would therefore propose that the thanks of the Chamber be tendered to Professor Church for his valuable services, and its condolence with him in the circumstances under which he was leaving them (Loud applause).

Mr. H. J. MARSHALL, a member of the College Council, said he was very glad to second this resolution, for he himself certainly did feel very much indebted to Professor Church for his able assistance to them, more particularly in the matter of the agricultural experiments which he helped to carry out (Hear, hear). In that respect the learned professor had benefited them, where a man most felt it, in his pocket, for he had assisted in teaching them how to apply their manures to the best advantage, and how not to waste their money (Applause). He thought it was therefore desirable that the Chamber should recognise as a body Professor Church's services by voting him some sum of money, together with the cordial vote of thanks which Mr. Hulbert had proposed (Cheers).

The PRESIDENT (Major Chester Master, M.P. for Cirencester) said as Chairman of the meeting he thoroughly endorsed every word that had fallen from the two gentlemen who had last addressed them. Perhaps it would be as well to pass a resolution, and have it placed upon the minutes of the

Chamber, something to this effect—that the Chamber tendered its best thanks to Professor Church for his able and kind services rendered to the Chamber in past years, and that a recognition of some sort be offered to him (Loud applause).

The meeting having carried the resolution by acclamation, Professor CHURCH said he could say that in returning thanks for such a kind expression of opinion as that which had just been passed he did so from his heart. The work he had done for the Chamber had been done as a matter of very great pleasure to himself, and he was only glad to hear that in the opinion of important members of that Chamber, he had been able to render some service to agriculture in this district at all events (Loud cheers).

The following are a few of many letters received upon the above subject, the whole of them, with one or two exceptions, expressing indignation at the treatment Professor Church has received:—

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I was rather surprised to learn from your leading article of the 3rd instant that the Committee of Management were about to meet to decide the difference between Professor Church and Mr. Constable; for by this step they would seem to admit Professor Church's contention that the Principal's action was unauthorised.

I understand now that they have decided that the Principal's action was not indiscreet as well as unauthorised, or, rather, that it is inexpedient to impute publicly a serious error of judgment to him. Their arbitration will have one good effect: it will close the purely personal aspect of this unfortunate dissension.

But a new phase of the question is opened up by your article above mentioned. It seems to deserve serious inquiry—not only from the Committee of Management of the College, but also from the agricultural public, who ought to be benefited by the College—whether the bye-laws are consistent with reasonable success. To my mind they *seem* (unless qualified by others which do not appear in your selection) to be utterly opposed to the interests of the College as an institution for technical education; nay, they seem inconsistent with even financial success. I will draw attention to one point only.

The immediate effect of these bye-laws is to promote frequent changes in the staff. A dismissal under Bye-law XXIV., be it hasty, be it unjust, is final. There is practically no appeal against it. Had the dismissal to come from the Committee it would be determined without haste, and a Committee might negative a private suggestion from the Principal without the ill effects that would of necessity arise from a public reversal of public decision. Thus it would appear that under the new bye-laws dismissals and changes would be more frequent than under the former bye-laws. Let the Committee instruct their secretary to make a return of the dates of the appointments and vacancies in the professional staff, including temporary lecturers; and with this return before them examine whether the changes have not been far too numerous of late.

The disadvantages of such continuous changes are too obvious to require much comment. A student who picks up his knowledge of one subject under two or three professors in succession has had scarcely fair treatment. A professor coming to a technical college is not, in the majority of cases, in a position to treat his subject in a manner perfectly adapted to the wants of the students. When he is becoming really valuable he may be dismissed, and the very expectation of this may deter him from the trouble necessary to make his lectures of the utmost value. Certainly, unless the Committee, even now, revise their decision in a recent case, he will not look forward to a continuance at the College simply on the ground that he does his work well. So much for the expediency of Bye-law XXIV. One word as to its legality.

By the Deed of Settlement of the College the Council has full power "to nominate and appoint out of *their own body* one or more Committees or Committees, who shall have full power and authority to do, execute, and perform, such of the matters and things as the Council shall think proper to delegate." I ask, has such a Committee, has even the Council, the power to delegate any of its functions to a man who is not a member thereof? If not it would appear that Bye-law XXIV. is inconsistent with this Deed of Settlement, and therefore, I presume, illegal.

I am, Sir, &c.,

AMICUS CURIE.

SIR,—I have read the remarks and correspondence in your paper on the subject of Professor Church's retirement from my old College at Cirencester with the deepest regret. His work speaks for him too loudly to need my commendation, and all who are interested in the progress of agricultural chemistry know how successfully he has laboured for its promotion. I must confess I am astounded that a retirement should be encouraged, not to say forced upon him, for the only reason I have heard given, namely, that he is about to marry and wishes to reside out of the College. The decision is so extraordinary and one so almost induces me to say there must be some undeclared reason. If so, it should be made known; otherwise the judgment of the public must be to the discredit of those in authority. I shall look with anxiety to some further explanation of the facts. Meanwhile, Sir, please, do your best to give us the truth, the whole truth, and nothing but the truth, for I am bound to say that the facts, so far as they have appeared, leave me to judge very unfavourably of the treatment he has received.

I am, Sir, &c.,

AN OLD STUDENT.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—Does J. R. N. seriously mean to assert that "independence of action and thought" has not been exercised by the various professors of Cirencester College since 1870, when the new bye-laws came into force?

Does he intend his remarks also to apply to the practical farmers, by whom candidates for the diploma are examined? They at least, we may hope, are not subject to the new bye-laws of 1870, nor to undue influence of any kind whatever. Much as graduates of the College may desire the management to be improved, the writer, as one, cannot think J. R. N.'s line of argument quite sound. We need the facts bearing on the subject.

I am, Sir, &c.,

NIL DESPERANDUM.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I am glad to find one of your correspondents, "J. R. N.," drawing attention to the fact that the bye-laws and regulations of the Agricultural College virtually place the power of granting a diploma in the hands of one man. This appears very clearly from his letter, and the question with which he concludes—as to whether the diploma has ever been granted independently of the prescribed examinations—is a very pertinent one. A perusal of some of the "prize and class lists" published by the College leads me to the belief that the diploma of the College has been so granted. This, however, is a point that can at once be confirmed or negated by the College authorities.

May I draw the attention of your readers to another bye-law (XVII.), a portion of which reads as follows:—"The portions of the subject required as a minimum

qualification for the College diploma *shall be fixed by the Principal*, and shall be printed in the prospectus." Comment is unnecessary.

Bye law XVIII. begins thus:—"The final examination for the College diploma shall be conducted either partially or wholly by public examiners, not connected with the College. . . . No student can be allowed to enter upon it until entitled to certificates from the Principal of his good conduct and regular attendance upon the farming operations and requisite course of lectures, and upon such previous examinations, from time to time, as the Principal may find it advisable to appoint."

As to the first clause of this it is worth while to inquire how far the examinations are conducted in accordance with the spirit of this salutary provision. If my information is correct, public examiners are appointed for one subject only, and they have the disposition of about one-tenth of the marks on which the diploma is granted.

As to the second clause, it may suffice to point out that it ignores the Professors entirely. Of course, under such regulations, it would be useless to expect to get men who were competent to determine the frequency and the duration of lectures and examinations on their special subjects, but one would have hoped to find them capable of granting certificates of attendance upon their respective courses of lectures.

I am, Sir, &c.,

R. R.

#### TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—The resolution which the Committee of the Royal Agricultural College have passed respecting Professor Church is a very significant one, and it should not be allowed to pass without public notice. It most clearly implies that the first and foremost qualification an applicant for one of the College Professorships should possess, is that of being an excellent usher—I can think of no other word—and that the first and foremost of his duties will be the maintenance of order in the College. Quite subsidiary to this disciplinary qualification is that of being able to teach the subject required. So that young men who go to Cirencester must expect to find that discipline is the chief thing to be impressed on them there, while the acquirement of a knowledge of subjects of agricultural importance will be quite a secondary consideration. I think there is no wriggling out of this interpretation of the resolution; for have not the Committee dismissed one of the very best agricultural chemists in the country solely on the plea of discipline? Certainly this plea originated with the Principal, but his Committee, having dutifully adopted it, must now be credited with its paternity.

By the way, what sort of men are these students at Cirencester? From the resolution one would infer that they are a wild, turbulent, ill-mannered set of fellows who can only be kept under anything like control by the most stringent forms of discipline, and that for the enforcement of this discipline the presence of *all* the professors is a *sine qua non*. And yet, up to the present time, I had the impression that the Cirencester students, taken collectively, comprised a body of courteous well-bred gentlemen, comparable for politeness and general good behaviour with those of any of our great public schools or colleges. I suppose I was mistaken; nevertheless, I have often read, in the *Field*, of the exploits of the R.A.C. athletic teams, and I find it somewhat difficult to reconcile excellence in our manly English sports with rowdiness. If the question of discipline at the College is so serious a one as the resolution implies, would it not be well to have some half-dozen ex-military men living in the College to maintain order, and to allow the professors all to live out so that they might have that quietness and convenience necessary to

enable them to prepare their courses of instruction?

Two things are patent to everybody who reads the Committee's resolution. Either the discipline at the College must be in a shocking state, in which case the Committee have not acted very wisely in publishing the fact to the world; or, a great injustice has been done to the students referred to. Which is correct? Can somebody "who knows" throw any light on the subject?

I hope this letter will not be too late for insertion, but I have only just seen a newspaper containing the resolution.

I am, Sir, &c.,

T. B.

March 15.

### FARMERS' GRIEVANCES.

#### TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—The outlook equally of the politician and the economist has in it "a mote to trouble the mind's eye." Communism, which began at Paris, went over to Nihilism in Russia. It has reared its hideous front in the United States. It threatens to outface the Emperor of Germany, and outvote Bismarck at Berlin—and "these, that have turned the world upside down, have come hither also." My letters have already brought upon me printed schemes for nationalising the land—buying up all private property by the issue of State paper, and dividing these islands into, and governing the State by, a hundred Communes. "Peace to the Cottage—War to the Chateau." These are not the express words, but do they not ambidextrously convey the spirit of much that is at present rife in the social discussion of the time? Veil it as they may, there is manifestly a tendency among those who have no immediate property in land, and too many of the tenantry, to regard a landowner as a burden and a superfluity, *fruges consumerem natum*. "Hit him! He has no friends!" The fine name of legislation is given to proposals for practically confiscating his property. His is to be an exception to the rule of "doing what one likes with one's own." A "compulsory Tenant Right Bill" is to be imported from Ireland. The Law of Distress, on the security of which land has been purchased, is to be abolished by statute. The Land Tax is to be revived in its original stringency, and, in short, ownership of the soil, except in connection with its occupation and culture, is beginning to be regarded as a sort of tax to be thrown off, rather than the subject of a fair debt to be honestly paid. Let this sort of speculative revolutionism go on, and does any sane man expect it will stop at the acquire? Will the gentleman farmer be spared? Will large aced tenantry be tolerated? A word to the wise!

Is the farmer the only customer whose merchant insists on taking his own view of his own interest? What trade is there that does not extort all it can from the purchaser? The exorbitant profits of the retailer have produced civil service co-operation. The fees of the lawyer are an extortionate monopoly. It is only against the acre merchant that the force of law is invoked. Why is it that the tiller of the soil, of all men in the world, expects that his creditor should conduct his business on other than commercial principles? Who is more summary or exacting than himself in all his dealings? Does he throw 20 per cent. off to the miller when wheat starts up to 70s. a quarter, or give time to the green-grocer to whom he sells his potatoes? Such loose ideas of commerce as prevail in the trade of food-raising, would ruin men in any other business. I know nobody but the farmer who still requires to be taught that a "bargain's a bargain."

I own there is that in his calling ominently calculated to mislead a man who is short in his outlook. Who

could have foreseen four such years as the last? Yet it is a meteorologic law that the seasons shall run in cycles—and the food-producer should take warning, not to live up to his income, but to store up the profits of abundant seasons, to meet the loss of the lean kine. Do farmers ever think of doing so? Do they not spend as they go and expect that "to-morrow will be as to-day and exceeding more abundantly?" Do they not put on the land and the weather the fault of their own want of providence, and expect a sort of out-door relief from the squire for the hard times against which their own frugality should have provided? If in taking the land they do not sufficiently calculate the vicissitudes of the cycles, who is to blame for that? They should allow for the certain periodical recurrence of bad seasons, either in the rent they offer, or in the expenditure to which they limit themselves.

From all I can see, I incline to the belief that foreign growers cannot afford to send grain to our markets at prevailing prices, and that the home-producer will have more of his own to sell. His American competitors have high wages, dear implements, costly transport, and a scanty acreable produce to contend against. His own average growth is much the largest of any agriculturist, and his customers are at his own door, with neither freight, warehouse rent, nor commission to take the gill off his gingerbread. With higher farming, deeper draining, and a plentiful use of artificial manures, there is yet pith in him to beat the wolf from the door. What may be done on third rate clay soil by skill and enterprise Messrs. Prout and Middleditch have abundantly proved. Mr. Mechi's balance sheet also is sufficiently encouraging. Every farmer should read, mark, learn, and inwardly digest Mr. Bear's paper in the *Fortnightly Review*. "The average yield of wheat," he observes, "for the United Kingdom according to official estimates is 29½ bushels per acre, while that of France is 16½, that of Austria 12½, that of Russia 5½, and that of the United States about 12." He adds, the British farmer has a natural protection of 10s. per qr., and that in such young states as Illinois, Iowa, and Wisconsin, the average yield is only 8, 10, and 13 bushels per acre, quantities which it would not pay the British farmer to grow, if he had his land rent free. What tribute could be more splendid to the qualities of our soil and the skill of its tillers?

In your own columns, indeed, an American farmer is made to say that the cost to convey a quarter of wheat to this country was 9d. per qr.\* He saw a vessel loading just as he left with 70,000 qrs. I wonder what sort of "A man of business," as he signs himself, that could be who believed a vessel could carry that quantity of grain. Is he aware that it would require a ship of 14,000 tons burden to do so, and that the very largest grain vessels seldom reach one-tenth of that tonnage? In this connection I have been deeply impressed with the valuable information your pages supply of the oppressive labour, the hard fare, the hugger-mugger life, and the wretched profits of the American farmers and labourers. It is very clear that agricultural distress is not confined to this country; and that the worst off among them would gain little by changing places with his trans-Atlantic competitors.

Yet, with all his advantages, and with the faculty, according to Lord Derby and more scientific authorities, to double even his present cereal fecundity, the British farmer still has to struggle with grave difficulties. He has suffered "Hodge" to "get the upper hand" of him. That personage's insolence, his turbulence, his scheming selfishness, his growing inefficiency, have become simply intolerable. Utterly averse as I am, as a principle of

economics, to every form of combination, it has now become clear that the conduct of the business of the farm will arrive at a dead-lock unless masters come to a thorough material understanding which will enable them resolutely to assert their own position, and keep their servants in their proper place. When it comes to this, that employers are afraid to speak to their men, while they cannot venture to direct their own operations, and those they pay to do their work, farming will become wholly impossible. My own impression is, that much of this turbulence would disappear if the men were accommodated with cottages on the farm, in place of being sent into the villages, if they were hired by the year, if their wages were paid chiefly in kind, and the balance in money settled at the end of the half-year, as in Scotland.

The grievance of insecurity of tenure I cannot help tracing to the tenantry themselves. Nineteen years' leases are universal in Scotland. Self-respect forbids a Scotch tenant from placing himself at the mercy of a landlord, and if unity of action, and the force of custom and public opinion, had their proper force in England, no farmer would be without the security of a lengthened period of occupation. Rents are higher in the worse climate on the other side of the Tweed. If the English tenant prefers a lower rent to greater fixity of tenure, what ground has he for grumbling at his bargain? My wonder is that the land owners can tolerate a tenantry at will or of short duration. I could have no expectation of my tenant doing justice to my land if he were left at the mercy of a notice to quit depending upon my humour. It is easy to give the nick-name of "confiscation" to the act of resuming occupation of a farm when the term of a lease has expired. It is against the natural interest of a landowner to turn out a tenant who punctually pays his rent, and keeps his farm in good heart. I am very sceptical of "confiscations" of that sort. But if they happen, the fault is the tenant's own. *Caveat emptor*. Why should the Legislature be invoked to do for the tenant that which he can do for himself. This Irish system of feeding farmers with the spoon of an Act of Parliament "likes me not." Rent is lower in England than in either Scotland or Ireland. If the English farmer prefers cheaper land to greater security who is to blame for that?

As for what are called "restrictive covenants," I should like to have this term specifically defined. *Dolus latet in generalibus*. Is any landowner such an ass as to object to replacing straw and hay by an equivalent in imported manure? A tenant must consume all of these his quadrupeds require for his own accommodation. The surplus of either, unless sold, is comparatively worthless. No proprietor, in the present state of agricultural science, would object to white crops in succession, if the pith were restored to the land by putting back the fertilising substances abstracted from it. But no man who knows anything about land is unaware that when a tenant is once let into possession, it is entirely in his power to strip his farm in a season or two of half its value, and so to ruin it that no farmer will be prevailed upon so much as to look at it. I have seen this so frequently—I have found so many owners scandalously robbed by the power to ruin a farm, which cultivators or scheming tenants have acquired by being let into possession, that I am not at all surprised a necessity should arise for "rigid covenants." My mental equilibrium is not upset by all the cant about hard-hearted landlords. How many of these are widows, orphans, poor persons, persons poorer than their tenants, whose all is destroyed—ruined and riven out of the land by "liberal covenants." When "a d—d good-natured friend" expressed his surprise that a certain Billy Whittaker, being drowned in debt, could sleep in his bed for thinking of his creditors, he

\* This was an error; for "qrs." read bushel.

answered, "I am more surprised that my creditors can sleep in *their beds*." Jeremy Bentham remarked that nobody sympathised with the man to whom money was due—pity was reserved only for the man who didn't pay his debts. *Gutta cavat lapidem sæpe cadendo*. This constant hawking at land-owners may instigate an agrarian spirit dangerous to the good order of society, and in the view of household suffrage in the boroughs, and its extension not only to the counties but to Ireland and Home Rule, it may induce a state of public opinion among the newly enfranchised masses, of which respectable and responsible tenants may be the first to bear the consequences. History has not forgotten the seigneuries of New York State that manhood suffrage and agrarianism at last wrested entirely from their owners by mob violence and daring defiance of the law. Once tamper with the sacredness of private property in our old country, and highly artificial society of involved mutual interdependence—raise a suspicion of the stability of public credit, and who will suffer more bitterly than those who are now too apt to lend themselves to the cry that holds up the owners of the soil to the discontent and rapacity of communistic envy. Let the game laws and game licenses go. Let public opinion and the determined action of the tenantry bear down the vicious custom of precarious tenure. By all means restore to the habits of society the old feudal and copyhold tenures which made the holding of the soil as perpetual and hereditary as the proprietorship, reviving the ancient relations of *dominium utile* and *dominium directum*. I am persuaded that it is for the permanent interest of agriculture, tiller, and owner. Hold up to social execration the man who *really* takes advantage of the simplicity and workfulness of the tenant by extending the occupied who faithfully observes all the covenants of his lease and generously improves his farm merely because he has failed to take the precaution of securing himself against eviction. I advisedly say *really*, because I am persuaded that many cases of alleged hardship are the mere clamour of bad tenants ejected for only too good cause. As for liberal covenants, the Romans had an agrarian officer who decided all questions of boundary, marches, and culture. In the public interest I would have it declared as a radical principle of public law and national policy that the misiculture of the soil of the country was an offence against the State. I would sweep away all covenants as to culture and place the whole process of tillage under official supervision, a provision for which owners as a class would be most thankful, and which would relieve the tenants of antiquated and irksome restrictions. As for the laws of hypothec and distress, of entail, primogeniture, peasant proprietors and small holdings—they each require and merit more elaborate treatment than they can receive at the far end of another subject—and to these questions I may address myself if your space, my time, and your readers' patience may admit of it.

I am, Sir, &c.,

SIDNEY SMITH.

*The Manor, Feltham, February, 1879.*

## CANADIAN CATTLE RAISING.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—In all communities of men there are some who, under the guise of devotion to the interests of truth, regardless of sects or parties, contrive to veil either their own bitterness of soul, or sinister and unworthy motives. Such a man I take to be your Canadian Correspondent. I know not what his history may be: perhaps it is a case of bitterness of soul; and that, having aimed at great things there, and accomplished but little, he deems all the fault to be in his adopted country, and none in him-

self; and, in decrying it, thinks that he explains his own shortcomings. I would rather accept this interpretation of the tone of his letter than the other—that he has unpatriotic or personal interests to serve. But, be his motives, or the influences affecting him, what they may, I cannot find in his letters that genuineness which I always look for, and rarely fail to find, in the columns of your journal. They are not in fact, what we, in the North country, call "jannock."

I have no interests of any kind to serve, but I know something about Canadian matters; and I think it is a great mistake, on every ground, to decry Canada without rhyme or reason, which seems to be the cue ever present in your correspondent's mind. Even supposing every allegation contained in your correspondent's letter of February 17th, and again of March 3rd, were strictly true—which I shall quickly show they are not—what good can come of such a partisan colouring as he has given to them? The Canadian Government think, and in my opinion rightly, that no country in the world has greater advantages to offer to the immigrant, and especially the agricultural immigrant. Be that as it may, if Canadian enterprise has brought cheap animal food to this country in a time of great depression and distress, it is entitled to some credit on the one hand, whilst on the other, it has certainly not damaged British farming interests in a greater degree than the States. It is the evident animus—the wish to depreciate Canada and its capabilities, and the attempt to do so upon anything but sufficient data, to which I object in your correspondent's letters. For instance, in his letter of February 17th he says:—"The chief of the dealers who hold the cattle export trade in their hands in Canada are Americans by birth, domiciled in Toronto." Now, I am told that there is not one native-born States man now engaged in the Canadian export cattle trade; but that the majority are English-born. Perhaps your correspondent will favour us in his next letter with the names of a few of the genuine Yankees to whom he refers as "the chief of the dealers" at Toronto. Again, in his letter of the same date your correspondent says he estimates Canada's capabilities for supplying this country with fat cattle at only 5,000 head per annum; a statement which places him on the horns of a dilemma, for it proceeds either from gross ignorance, or a wilful intention to deceive. Further, he calls the statistics officially given for 1878, viz., 82,115 head of cattle and 62,461 sheep, as the number exported to this country from Canada, an "absurd exhibit." Well, let us see as to that. Your correspondent in Canada indulges in strong language; but he has that supreme contempt for facts and figures which your intense lovers of truth so often exhibit. Let us test him with a few. According to the census of 1871, which I hope even your correspondent will admit to be authentic, there were in the four provinces of Ontario, Quebec, Nova Scotia, and New Brunswick, in that year 1,251,209 milch cows, and 1,233,446 other horned cattle. These figures yielded an average of 32 milch cows to 100 of the population in Ontario; and no doubt the average would be about the same for the other provinces; whilst to the States it was only 27 per 100 of population. Sheep presented a similar disparity in favour of Canada. Let us carry these figures a little further. Milch cows are presumably—subject to your correspondent's correction—breeding cattle; and, therefore, it is not an unfair estimate that 1,000,000 calves were born in the Dominion in 1871. Of these at least one-half would be bull calves, and after deducting 10 per cent. retained for breeding purposes, there would be no fewer than 450,000 in one year available for the market, in one form or another. If we deduct one half for home consumption, there still remained 225,000 capable of being reared and fattened for

any outside market that presents itself. How does this compare with your correspondent's estimate of 5,000? Yet this, mark, was in 1871, before the opening of the Transatlantic trade. At the time this trade was initiated large numbers of bull calves were killed when very young and for little more than glue and their skins. Cheese and butter were about at their lowest price for several years; and when the outlet of the beef market presented itself the Dairymen's Association of Canada urged strongly that dairy production should be decreased or held for better prices, whilst the farmers devoted themselves more to the rearing of their bull calves for the beef market. This led to an enormous increase in the number of beef cattle.

Yet even this did not check the increase of dairy produce. The cheese alone that Canada has produced and exported to this country has increased 737 per cent. in nine years, or nearly 100 per cent. per annum. Cheese is a product of milk I believe—at least it is in this country—and milk requires cows—*ergo*, there must have been a vast increase in the milch cows of the Dominion since 1871. The same remarks in an almost equal degree apply to butter. All this means a vast increase of late years in Canadian milch cows; these cows bear calves, a moiety of which at least, again subject to your correspondent's correction, are of the male gender, and in due course become oxen and are fattened for the market. This, however, is not all. I have before me statistics, the accuracy of which I have no reason to doubt, which show that in the years 1873 and '74, before the inauguration of the cattle trade with this country, Canada actually exported to the United States 74,661 head of cattle, and 51,494 sheep. This was at the rate of 37,330 cattle, and 255,700 sheep per annum. How do these figures compare with the 32,115 cattle and 62,461 sheep which your correspondent so impertinently calls an "absurd exhibit?" Of course, your correspondent may have discovered, or will discover, that all these cattle and sheep were brought over from the States first, and then sent back again, in order to show what Canada can do as a producer; but whilst the figures stand without such impeachment it is not reasonable and probable that, with all the incentives which the Canadian-British trade has brought to the Canadian farmer during the past four years, her resources as a beef-producer have very materially increased; and that if she could spare 37,000 beesves without any special incentive to produce them, in 1874, she could export at least as many in 1878 to a remunerative market?

Your correspondent's case presents other inconsistencies. For instance, is it not "absurd" to suppose that the proverbially acute Yankee dealers, the keenly competing States railways, and the powerful and equally keenly competing New York and Boston lines of steamers, would allow a profitable trade to go to so large an extent as your correspondent would wish us to believe, *via* Canada, if by hook or by crook they could keep it in their own hands? Yet again, if, only five years ago, the States found it necessary or desirable to import cattle to such an extent as I have shown from the Canadas, and that before any market in Europe had opened out, is it likely that now, in spite of the 20 per cent. duty to Canada, which they have not to pay to England, they should have reversed the order of things and export so largely to the Dominion?

Your correspondent reflects strongly on the quality of the Canadian cattle. Surely he will be candid enough to admit that in no country in the world has there of late years been so great a demand for high and pure breeds of cattle, and that the Dominion can now boast of many of the finest herds in existence.

On the question of general policy, is it wise, prudent, or patriotic on the part of any British subject or any English journal to decry one of our most loyal and prosperous colonies, to the glorification of our great and unscrupulous rival, the United States? It is a fact, shown by what was done at the meeting of the Canadian Board of Trade in January last, that Canada, at any rate, has every disposition to foster trade with the mother country, on equitable terms, whilst the States have put, and are rigidly maintaining, an absolutely prohibitive duty upon all our principal articles of manufacture, iron, cotton, &c., which they themselves produce. In fact, the States with one hand are swamping the British farmer with food products of all kinds, whilst with the other they firmly close the door against a reciprocal trade which might do something to remove the existing depression in this country, and in the general benefit following which, the British farming interest, at any rate, could not be a loser.

It is to be regretted that Canada has not yet produced any statistics corresponding with our own agricultural returns. If they now existed, as I hope they soon will, I should not hesitate to refer to them. Still, I think I have given you facts enough to show that your correspondent's letters have no foundation in substantial fact, and have not even the poor excuse of expediency.

I am, Sir, &c.,

WITHOUT PREJUDICE.

## OUR FOOD SUPPLY.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—My attention has been called to an article in the *Daily Telegraph* of the 28th ult. on our Food Supply, and I rejoice to learn on such authority that there is no fear of our fellow-subjects suffering from the worst of ills that flesh is heir to—starvation. The writer of that article draws vivid pictures of the vast supplies already come and still coming from all parts of the world—corn, meat, and cheese from America, butter and eggs from France, milk from Norway and Switzerland, cattle from Germany; Australia, too, sends her stores of wheat and wool to the mother country. All this is very pleasant, and sounds fair to the ear; but to me, as an agriculturist of upwards of a quarter of a century, there is matter in this article for grave thought, and I think the subject may be found worthy of consideration by those who have the welfare and future prosperity of their country at heart. It is calculated that we have at the present moment 30,000,000 acres of uncultivated land in our own country, and much of this is equal to the best of land under cultivation. Why is this? If our own acres are sufficient for the production of food for our own people, why are they lying barren? If two blades of grass could be made to grow where now only one is grown, why do we hear complaints of agricultural depression and flagging trade? Gold must be sent to the foreigner for the food he sends us if, as seems too true, he is manufacturing goods for himself, and no longer needs our manufactured goods. The veriest tyro in political economy must see that such a state of things cannot continue. There are two worms gnawing at the root of our national prosperity, the one social, the other moral. To state them briefly: If the laws affecting the sale and transfer of land were reformed, if the Law of Entail and the Law of Distress were repealed, and if security of tenure, freedom of cultivation, with compensation for unexhausted improvements for tenant-farmers, were enforced, and the burden now laid so heavily on land alone were distributed fairly over all classes, the farmers would cheerfully put their shoulders to the wheel, and success would reward their efforts. On

the moral part of the question I can touch but lightly within the limits of a letter; but if the labourers were thrifty where now they are unthrifty, who can calculate the immense difference it would make to our national wealth? To take an illustration: If an agricultural labourer now spending one shilling in the village public-house—and well would it be for him if this were the maximum—in what to him is the luxury of beer or spirits, taken in the company of his neighbours, were to invest the same shilling in poultry, fed by the waste from his table, the wealth of the country would be proportionately increased. We now send two millions sterling annually to France for eggs alone, of which one million are imported daily. Might not these eggs be produced by our own poor if the public-house did not hold out such overwhelming seductions to working men? I think few can venture to deny it. We are now professedly in the van of agricultural progress; this position has been attained partly as the result of fortuitous circumstances, but more still by the perseverance of our race, which knows no defeat; and if we would maintain our standing we must look about us for remedies of the present position, and cast aside all antiquated prejudices. But one thought must animate all classes of producers—a determination to overcome the difficulties of the situation. If our land under fair conditions is capable of providing food for our own people, why be dependent on foreign countries? At least the experiment is worth the risk. We want more of the spirit of the Romans, when every man felt that on him alone depended the welfare of the state. Not to one thing must we look for help; for as the causes are many, so must be the remedies. The writer in the *Daily Telegraph* said that to his picture there was no dark side. I differ from him. There is a dark cloud overhead; but in the possibilities and capabilities to which I have pointed I see the silver lining.

I am, Sir, &c.,

Walton-on-Nase, March 7.

WILLIAM DELP.

## THE INTERNATIONAL EXHIBITION LONDON.

On March 13th a deputation from the Mansion House Exhibition Committee and the Council of the Royal Agricultural Society of England waited upon the Church Estates Committee of the Ecclesiastical Commissioners, for the purpose of urging the immediate completion of Brompton-road, Kilburn, close to the site of the Exhibition. The deputation included Lord Richard Grosvenor, M.P., Lord Moreton, Lord Reay, Hon. W. Egerton, M.P., Sir Brandreth Gibbs, Mr. Alderman Staples, Mr. T. Aveling, Mr. H. Aylmer, Mr. Walter Gilbey, Mr. Charles Hambro, Mr. R. Russell, Mr. G. M. Allender, Mr. J. Webb, Professor Simonds, and Mr. H. M. Jenkins (Secretary of the Royal Agricultural Society).

LORD RICHARD GROSVENOR, in introducing the deputation, pointed out that the Ecclesiastical Commissioners must make the portion of the road not yet completed in the course of a very few years, and if they completed the road at once it would advertise their property during the period of the Exhibition. He regretted that neither the Society nor the Mansion House Committee had any fund from which they could subscribe towards the making of the road, and the inhabitants of Kilburn had expressed themselves as unwilling to contribute towards the payment for it. He trusted that the Commissioners would see their way clear to doing at once what it was obvious they intended to do eventually, as they were a public body, and that their object was to promote the public good.

Mr. Alderman STAPLES explained the desirability of the road being made so as to enable people who visited the

Exhibition to return through Kilburn, which was a shorter route than any that was at present available to them. The inhabitants at Kilburn at present felt that the Exhibition, although in their midst, would not benefit them, as in consequence of there being no direct road from it to the heart of their district the visitors to the Exhibition would not pass through Kilburn either in going or returning. He was desired by the Lord Mayor to express his regret that the having to preside over a meeting of the Common Council of the City prevented his heading the deputation, which he otherwise would have been glad to do; but he had requested him (Mr. Alderman Staples) to say that as the food supply of the people was at the present moment a matter of the greatest public importance, he felt sure that any effort to cheapen it and to bring the means of increasing it before the public would command the sympathy and the support of the Ecclesiastical Commissioners.

In reply to a question as to the distance which would be saved by making this road,

PROFESSOR SIMONDS stated that it would save fully three-quarters of a mile or more, and that the pipes were already laid down along the entire length of the Brompton-road which was still incomplete, viz., not more than one-quarter of a mile.

In reply to further questions,

The SECRETARY of the Society (Mr. Jenkins) stated that the present access to Salisbury-road from the Carlton-road was over a very steep railway bridge, which was difficult for heavy traffic, that from the Salisbury-road it was a considerable distance to any church in consequence of the Brompton-road (in which a church had been built) being still incomplete, and that these causes combined to prevent people from taking plots of land for building purposes adjoining the Salisbury-road. He added, with regard to the equivalent which the Ecclesiastical Commissioners would obtain from the outlay which they were asked to make in connection with the Exhibition, that the Royal Agricultural Society had already spent £1,000, and were spending a still larger sum, in draining and otherwise improving the property belonging to the Commissioners.

Mr. Charles Hambro, the Hon. W. Egerton, M.P., and others having spoken,

EARL STANHOPE, in reply, stated that the deputation had thrown several new lights upon the question. The Commissioners were most anxious to overcome the difficulties which they had seen in the way of acceding to the wishes of the Mansion House Committee and the Council of the Royal Agricultural Society. It was quite true that at some future time they would have to complete the Brompton and the Victoria-roads, but the development of the district was not so rapid as some members of the deputation seemed to think, and the Commissioners felt that they were scarcely justified in spending £2,000 in making 600 yards of road which might for many years be unremunerative, as the object of their establishment as a Commission was to build churches and rectories. At the same time he admitted that there was much to be said from the several points of view which had been urged by the deputation, and that he and his colleagues would carefully consider the arguments that had been advanced, and in the course of two or three days make known their decision, which he hoped would be satisfactory to the deputation and those whom they represented.

The deputation then withdrew.

There will be no separate meeting of the Hants and Berks Society this year.

# THE COUNTY BOARDS BILL AND THE HYPOTHETIC ABOLITION (SCOT- LAND) BILL.

HOUSE OF COMMONS.—MARCH 18.

Mr. SCLATER BOOTH asked leave to introduce a Bill for establishing county boards in England, explaining that the measure was somewhat different from that of last year. Referring to a notice of motion by the hon. member for South Norfolk, he wished it to be understood that there was not, nor ever had been, any intention on the part of the Government to obtain the passing of the County Boards Bill at the expense of the Valuation Bill, or vice versa. They had always laid down the principle that a Valuation Bill was the essential beginning of all attempts at reform in the local government of this country; and they were equally convinced of the importance of a measure for the establishment of county boards. Since last session he had received many communications which led him to suppose that the magistrates were not very anxious for the fusion proposed by the Bill of last year, and the supporters of county boards had also shown an indisposition to that principle. This point, with others, had been carefully considered during the recess, and although the new Bill was entirely consistent with that of last year, the Government had now given up the proposal to fuse the existing Court of Quarter Sessions with the county board. The magistrates would be left to the execution of their functions in connection with the police and the administration of justice, and under this Bill they would be a precept authority issuing to the county board their precept for the money which they required, and the county board having the exclusive power of levying, administering, and accounting for the county rate. The advantages of this change would be that there would be but one county body for all purposes, the arrangement would be of a more workable character than the one before proposed, and the Bill would be more easily passed into law. In the Bill of last year the task of river conservancy was assigned to the county boards, but as that subject was now being dealt with by a special Bill it was not included in the present measure. For a similar reason the question of the election of coroners was now left untouched in the Bill. He had not repeated the provision of last year's Bill as to the power of the county boards to make recommendations with regard to local areas. It was proposed to transfer to county boards the administration of the Highway Act of last year, and the management of bridges and roads, which had from time immemorial been vested in the magistrates, was also handed over to them. Another new power was that of reviewing the workhouse accommodation of each county. He left out any direct power over lunatic asylums, but gave power to inquire into their management, and to exercise influence over their enlargement. While fully aware that last year there was a strong feeling in favour of the selection of the union area in the formation of the county boards, the Government had decided to look to the parish for the election of the boards, and he considered that the union area, besides being objectionable, was impracticable. They proposed that at the Epiphany Sessions in the coming year the county justices should exercise a function similar to that which they exercised under the Registration of Voters Act, and divide their counties into wards for the purpose of the election of representatives on the county board. In order to construct these wards they might take any existing area they pleased, whether unions or broken unions, or other divisions which might be found more convenient. The guardians of the parishes comprised in each ward were to elect the members to the county board. It was proposed that the qualification for members of the board should be that of a guardian within the county, and that the number of members for each county should be so divided as that the justices in quarter sessions should elect one third and the guardians two thirds of the whole. It was further proposed that the members of the board should hold their office for three years, and that the election should be by a system of voting papers. It might be said, in reviewing this measure, and comparing it with the Bill of last year, that its purview was too limited, and the functions assigned to the board too few in number. He believed, however, that their exclusive enjoyment of the privilege of levying and administering the county rate would

give them an importance and standing in the county which could not fail to establish them on a firm and satisfactory basis. He saw no reason why this measure and the Valuation Bill should not be passed into law during the present session if hon. members would only show a little forbearance towards the plans of the Government, matured with great care, upon subjects of acknowledged difficulty.

Mr. STANSFELD had heard the statement of the President of the Local Government Board with very considerable apprehension and disappointment. The right hon. gentleman had altered the Government measure in consequence of the criticisms which were passed upon it last year; but he had altered it for the worse. The right hon. gentleman had disappointed their hopes in the proposed constitution of county boards, which should take over the whole business of the county, while he retained one third of justices upon them with their diminished functions. The power to alter local areas proposed to be given to county authorities was now to be taken away, and that was one of the most useful and promising features of the measure of last year. He failed to see how the mere duty of having to levy a county rate could lead to a great expansion of the power and functions of these boards in the future. As to the constitution of the board, they could adopt no other course than to take issue with the right hon. gentleman even more determinately than they did last session. Their view distinctly was that it was a most essential thing in the constitution of the county board that it should be built up upon administrative areas. He did not believe that a county feeling was to be created or fostered by constituting a poverty-stricken county board, with hardly anything to do, and leaving to the justices the most important part of the business. The great object of local government reformers had always been the simplification of areas, but the right hon. gentleman proposed the institution, at the arbitrary discretion of the justices of each county, of entirely new areas for the purposes of election. Then they were not to have direct election. That was a new point. He thought that direct election would give a consciousness of strength to the county board.

Mr. GREGORY thought it was a recommendation of the Bill that it did not propose to overweight the county board with business at first.

Mr. RATHBONE compared the attempt of the Government to build up a system of county government without a foundation in administrative areas, to beginning a pyramid from the top instead of the base. He characterised the measure as hopelessly inefficient.

Mr. FLOYER thought the Government had done wisely in not postponing the formation of county boards. He liked the Bill for the reasons which made some hon. members opposite distrust it. It did not aim at too much and it was not a sensational measure. He was glad it kept up old county divisions.

Lord E. FITZMAURICE believed this Bill offended against all those views of reform of county government which prevailed on the Opposition side of the House.

Sir G. BOWYER was of opinion that if a change is necessary the change proposed by this Bill is the least mischievous and will work well.

Mr. WHITBREAD pointed out that the view on the other side seemed to be that this county board should not have too much to do, because otherwise the county gentlemen would not take the trouble to attend. What relation would the new board have with the poor laws, what with sanitary expenditure, what even with lunatics except in the case of paupers? If it was passed, it would not settle any one of the great demands which local government reformers were making.

Mr. COWEN was disposed to think that this proposition was the feeblest and least liberal attempt to solve the question of county government that had been submitted to Parliament for the last quarter of a century. Instead of simplifying and lessening the number of areas it increased that evil.

Mr. HICK considered the Bill was entitled to the best support of the House.

Mr. HIBBERT pointed out that the support given to the Bill by hon. gentlemen opposite was of the very mildest character. He could not understand on what principle the selection of work for the proposed county boards had been made. For instance, it was intended to give them the care of imbecile poor; and, that being so, why should the manage-



ment of the lunatic asylums be kept from the new boards? He was afraid, moreover, that the character of the boards would not be such as to attract members from among the best men in the counties.

#### HOUSE OF COMMONS.—MARCH 19.

The SPEAKER took the chair at twenty-five minutes before one.

#### HYPOTHEC ABOLITION (SCOTLAND) BILL.

Mr. V. AGNEW, in moving the second reading of this Bill, recapitulated the action taken in the matter throughout the present Parliament, stating that in the last division on the question 45 out of 60 Scotch members voted, of whom nearly all were in favour of the Bill. The Scotch farmers complained that the existence of this law of distress damaged their credit, and at the last election had plainly shown their opinion by returning members pledged to seek its abolition. Through the existence of this law men of no capital were able to offer a high price for farms, knowing they had nothing to lose; it also enabled owners to accept offers from men who had not sufficient capital or credit. In this manner the credit of the farmer was injured, and through stunted employment or capital the production of the soil, as one of the first sources of national wealth, was not sufficiently stimulated. The present Bill would take away the preferential right of the landlord, who had to be paid in full for the use of the surface of his land, while other creditors, who had assisted in raising the crops, only got a dividend; while, on the other hand, it would allow the landlord to get early possession of his land when the tenant could no longer pay him for it. If the Bill would not effect those objects he would be willing to accept any amendments that would do so. He moved that the Bill be now read a second time.

Lord ELCHO moved, as an amendment to the second reading, a resolution declaring that the landlord's preferential right should be considered in reference to the three kingdoms and not locally or exceptionally, and laying stress on the facilities which the law has given to industrious and enterprising men to obtain farms and rise in the world. He showed that this preference existed in almost every civilised country, and, commenting in a sarcastic vein on the rumour that the Government meant to support the Bill with a view to the Midlothian election, he warned them that they would not be the better by a single seat in Scotland for yielding to a popular cry.

Mr. BAILLIE-COCHRANE, in seconding the amendment, characterised the Bill as a thumb-screw applied to Scotch members and Scotch candidates by the extreme Liberal party in view of the coming election. It was not a landlord's question, because they could protect themselves, but it would act as a great blow to Scotch agriculture by giving a monopoly to the large farmers.

Lord MACDUFF, in supporting the Bill, derided the notion that to abolish hypothec would extinguish the deserving class of small tenants. But to pass a law for the sole purpose of encouraging men without capital to go into agriculture was not only prejudicial to the country, but verged on rank Socialism. The present period of depressed agriculture was most opportune for doing away with an oppressive and unnecessary law.

The second reading was supported by Sir E. COLEBROOKE, Sir G. BALFOUR, Sir D. WEDDERBURN, Mr. McLAGAN, Mr. McLAREN, Sir G. DOUGLAS, Mr. J. BARCLAY, and Mr. C. S. READ, and Major BAILLIE-HAMILTON also spoke for the Bill from the Conservative benches.

The LORD ADVOCATE said he had long been of opinion that the law of hypothec was not defensible, and, seeing that the opinion of the great majority of the Scotch people and their representatives was in favour of sweeping it away, he cordially supported the second reading of the Bill. Lord ELCHO'S amendment, he remarked, was a plea for delay and an appeal to the feelings of the English members. The landlords' interests were fully protected by a judicial decision of 1756; but if that point were doubtful, he agreed that it ought to be made clear in the Bill.

On the other side, Mr. GREGORY pointed to the difficulty of restricting the abolition of the law of distress to agricultural tenancies.

Mr. RAMSAY, speaking from the Liberal benches, denied that hypothec had injuriously affected tenants in the grazing districts at least.

Sir G. MONTGOMERY doubted whether the Bill was desired by the majority of landlords and tenants, and Sir W. CUNINGHAME also opposed the Bill.

On a division the second reading was carried by 204 to 77.

## Chambers of Agriculture.

### PETERBOROUGH.

The adjourned annual meeting of this Chamber was held at Westgate on March 12th, Thomas Wilson, Esq., the president, in the chair.

The CHAIRMAN, in opening the proceedings, said the first question to be considered is whether this district Chamber is to be continued.

Mr. JABEZ TURNER said the question of their future existence as a Chamber of Agriculture was brought before them face to face. During the last year especially and the year before the attendance had been gradually falling off, for what reason he did not know. Their secretary told them their subscriptions had fallen off considerably, and would probably still further decrease; that he was in arrears for part of his salary and the whole of his (Mr. Turner's) expenses for the five meetings in London last year. He held a strong opinion as to the value of these Chambers. It was the only organisation that existed by which the opinions of agriculturists could be expressed so as to have any influence upon the Legislature of the country. It was all very well for gentlemen to say, as one of the correspondents of one of the Peterborough papers, who wrote in broken English, last week stated, that it was "no use subscribing to the Central Chamber; we ought to have a good local Chamber." What good would a local Chamber, unaffiliated to the Central Chamber, do? What good could it be expected to do? When the Peterborough Chamber was inaugurated there were 390 members, as Mr. BARFORD, their first very efficient secretary, had told them. Those members attended very diligently for the first year or year and a-half, some discussions took place, resolutions were passed, and sent to the Central Chamber in due course, but it appeared that there was no cohesion, no perseverance, among the agricultural community in attending to one particular subject. It was not sufficient for men to meet together and dine, pass resolutions, and because they had passed them and had that dinner, to think legislation was going to take place immediately after those resolutions were sent up to London. There was a difficulty about the days of meeting. Some gentlemen could not attend on Wednesdays, and farmers said they could not attend any other days. One gentleman—a tenant farmer—said, "What is the use of these Chambers? They are only landlords' places; all you do is to do something to benefit the landlords. If you will discuss some question that affects me, a tenant farmer, I will attend." Another says, "What is the use of discussing the Valuation Bill? If you will stop importation of foreign cattle I will come." Every man wants his own particular opinion alone attended to immediately and successfully, and so he says, "What is the use of our Chambers?"

Mr. BARFORD thought the Chamber should be tried for one year more. They need not necessarily send a deputy to the Central Chamber, and might get up some discussions on local matters more than imperial.

Mr. TURNER explained that they need not send a deputy to the Central Chamber so long as they continued the subscription, the minimum of which was three guineas.

The CHAIRMAN proposed—

"That in the opinion of this meeting it is desirable that the Chamber should be continued."

Mr. ATTENBOROUGH seconded the proposition.

Mr. BARFORD supported the same, and it was carried *unanimously*.

The Ven. Archdeacon KEMPTHORNE proposed—

"That the Peterborough Chamber still continue its affiliation with the Central Chamber, and pay three guineas per year subscription, instead of six guineas as heretofore."

Mr. BEZCROFT seconded the resolution, which was unanimously agreed to.

The election of Viscount Mandeville, M.P., as president of the Chamber, was carried by acclamation, and Mr. Jabez Turner was unanimously chosen vice-president.

The treasurer (Mr. Rowell) and the secretary (Mr. Buckle) were reappointed.

# Farmers' Clubs.

## DORCHESTER.

The monthly meeting of this club was held on March 15th. The chair was occupied by Mr. H. W. Hawkins, of Minstons, the President.

The subject set down for discussion was "The Seasons and the Crops—their Mutual Relations," which was introduced by Mr. Spooner, who said in all countries of the world sufficiently productive to produce crops of corn or food, the influence of the seasons over the crops, or rather the dependence of the latter on the former, is pre-eminent, and the more so in those countries which, by the aid of nature, are most productive. For example, we have seen in India during the late famine how great has been the destruction of human life, simply owing to the deprivation of rain during so many months of the year, this deprivation being in those months when the growing crops required its aid—its all in all—the more so that in the very country in which human life can be sustained with the least expense—where the wants, both of food and clothing, are the least, the destruction of life has been the greatest. The effects of drought have of late years been severely felt in all countries—in China to the extent of a famine; in Australia, where flocks of sheep and herds of cattle have succumbed; in Morocco to the extent of starvation; and in our own possessions in South Africa. By contrast with these examples we must consider that in this country, with all our disadvantages, with our variable and uncertain climate, with our clouds and fogs and alterations of temperature, witnessing as we do a variation of the thermometer to the extent of 30 degrees, not only in the same month, but in the same week—in spite of all this we have much to be thankful for. The two greatest enemies are extreme drought and extreme rainfall—the former blasting by scorch and direct attack, the latter by indirect action and its usual attendant, diminished temperature. The former is less injurious in this country than the latter, as it is rarely so continuous and is not without benefit to some crops, particularly to wheat; but the latter may be damaging at almost any season of the year. It may come in early spring and prevent or delay or hinder the sowing of spring corn, or a little later interfere with root cultivation, and encourage slugs and other enemies, or later still and it may spoil our hay, interfere with haying, and fill the land with weeds; or it may appear at Midsummer and damage the crops of wheat, or worse than all, as in this last year, in the month of August, interrupt the labours of harvest and disappoint the expectations of the year. The injury arising from excessive rain does not so much depend on the amount received as on the rapidity of the fall and the period. On light sandy or porous chalk soils the injury is mostly confined to the solution and washing out of the best and most soluble portions of the manure; but on loamy land and on strong soils in addition to this mischief there is the further injury that as soon as the fall exceeds that which can be received by the subsoil or that can be discharged by drains, the pores of the soil become filled up, the air is excluded or driven out, and the growing plants, according to their nature, more or less become suffocated, just as man or an animal may be if kept under water, or a fish if removed therefrom. In the case of very stiff clay soils the plants thus closed remain permanently so, or for a long time, and the plants are in a great measure destroyed; but in the case of loamy soils after the cessation of rain evaporation succeeds and the moisture in the upper soil is converted into vapour, and again leaves open for the atmospheric air the space it before occupied. Some 30 or 40 years ago, when the drains became all the rage, it was thought that on stiff clay land the tiles or pipes were sufficient, and would carry off all the surplus water, and that the surface of the land might be left flat. This, however, was found to be insufficient, and accordingly it was thought best to return to the system of drains, although not to the same extent as before, because although in time the water might pass away, yet the process was too slow; and although the first rains after fine weather carry down to the soil a considerable amount of the elements of nutrition, such as ammonia and nitric acid, yet after this is accomplished the continuous rain is devoid of these elements, and by passing through the soil abstract from it a greater amount of valuable matter than it supplies. It is better,

therefore, that the excessive fall should in a great measure be allowed to pass off the surface by means of the ridges and the water furrows. The injury inflicted by a heavy downfall of rain depends very much on the rapidity with which it falls. An inch or two of rain falling in twelve hours is much more injurious than if the fall is spread over double or treble the space of time as the soil becomes saturated and its pores filled—there not being time for the water to get away. However, it is by no means of these heavy falls that the great changes on the earth's surface is brought about, that the water supply is kept up or removed by means of springs, that the hills are washed down and the valleys become fertile. There is a remarkable variation in this country in the annual fall of rain, ranging from 16 to 20 inches in some of the Eastern counties in no less than 140 or 150 in some places in Cumberland. Each inch, you are aware, represents rather more than one hundred tons of water, and the amount of injury or benefit depends very much on the time of the year on which the principal fall takes place, and almost as much on the character of the soil on which it falls; an amount that would cause excessive injury on retentive land may be received with impunity and advantage on light porous soils and particularly on hilly pastures.

Mr. Spooner gave some particulars as to rainfall in different counties, and referred at some length to other portions of his subject. A discussion ensued.

## MAIDSTONE.

On March 13th a meeting of this Club was held at Maidstone, Mr. G. Marsham in the chair, to hear and discuss a lecture by Professor White, on "Hops; their History, Constitution, and Treatment." In referring to the history of hops, he said:—The use of hops in brewing appears to date from the ninth century. The Netherlands would appear to have been the first, or, at all events, one of the first places where the hop plant was cultivated and the value of the flower was properly appreciated, and to this district we are indebted for its introduction about A.D. 1524. But, strange to say, owing to a prejudice against them on the part of the physicians, who pronounced them unwholesome, their use was prohibited within a period of four years of their introduction, and this, too, by Act of Parliament then issued upon petition. Passing on to the quality of the soil Professor White said analyses had proved that the plant required a large supply of phosphoric acid and lime. He had a comparative analysis of Kent and Farnham hops, and while the latter contained in the flower 24 per cent. of potash,  $\frac{9}{16}$  of phosphoric acid, and  $\frac{7}{16}$  of phosphate of iron, the Kent sample showed a marked diminution in the quantity of those active principles, the respective amounts being 18.61, 5.26, and 6.0. This very fact, he believed, gave the Farnham hops a priority over Kent, the subsoil on which the former were grown containing a greater proportion of the especial properties required for the growth of the plant. Pursuing the subject further, and combining with it the constitution and cultivation of the hop plant, the Professor said the aromatic smell and taste of beer arise from the oil of hop. The bitter principle is soluble in water, and gives permanency as well as wholesomeness. The relative proportion of the active constituents in the hops is subject to much variety, consequent upon the soil, season, and culture. In this country three counties, viz., Kent, a small portion of Surrey—i. e., a small district surrounding Farnham—and Notts, have acquired celebrity for success in growing hops. This success, from my personal knowledge of their geological structure, I am disposed to attribute to the presence of a subsoil yielding an abundance of the mineral phosphates, which occurs so generally between the gault and green sandstone. Conjoined to this important feature, I need scarcely add, is the scarcely minor consideration of a deep rich loamy surface with a subsoil of deep brick earth. In the whole range of field operations there is none so precarious as hop-growing, and none so much affected by the weather, especially during what may be termed the harvest season. However brilliant and promising the crop up to the period of gathering, a few weeks' of rain will convert the season of hope and rejoicing into one of utter despair of obtaining a just reward for painstaking, mental anxiety, and reasonable well-grounded hope. Again, a blight at an earlier period may put a stop to the cultivator's reasonable anticipations, and prove too unyielding for all adopted preventive measures, and bid defiance to the cultivator's skill and experience.

## REVIEW OF THE CORN TRADE,

### FROM THE MARK LANE EXPRESS FOR THE WEEK ENDING MARCH 24.

The weather during the past week, until Saturday, was of a bright spring-like character, and the country was beginning to look fresh and green; but the sudden return of winter will check vegetation. Although the atmosphere has not been entirely free from moisture, the rainfall has been slight and the drying March winds has given satisfaction to farmers, who have been enabled to make steady progress with spring ploughing and sowing. Out-door labour of every description has been actively carried on, and good work done in reducing the arrears, but a good deal still remains to be effected before the operations necessary at this season of the year can be considered finished. A good breadth of beans and peas has been planted, and some wheat; but it is probable that, after the experience of last year, barley will engross a greater share of attention than usual, especially if the weather continues dry. Autumn-sown wheat does not appear to have suffered materially from the severity of winter, except upon the cold clays in the Midland Counties, where the crop is said to be backward and the plant thin and patchy. A return of wintry weather, attended by snow storms, had again brought agricultural affairs to a standstill in Scotland, but fortunately the milder days at the end of the week enabled farmers to continue the planting of oats. In bean sowing there has been some delay, however, and not much progress has been made with early potatoes. What with vermin and frost turnips are said to be nearly useless, and the pastures, which at this time last year were green and full of promising vitality, present a bare and starved appearance. But little change can be noted in provincial trade, which has been tolerably steady, but less active than was the case last week, as farmers still manage to find time to thrash pretty freely. The offerings of home-grown wheat at Mark Lane have been moderate, and condition has again been the weak point in the samples. Fine dry lots have found buyers at last week's prices, but the increased strength of the trade recently reported has been with difficulty maintained; indeed for the moment, the upward tendency of prices appears to have received a decided check. In secondary qualities there has been little or no business passing, as millers, having a good supply of dry foreign to select from, have been more than ever averse to holding inferior produce. The weeks imports of foreign wheat into London have again been moderate, last Monday's lists showing an arrival of 26,000 qrs., while the subsequent supply up to Friday did not exceed 32,000 qrs. The requirements of the country, on the other hand, have been very light, as millers appear for the present to be fairly stocked, or at any rate unwilling to follow an advance in prices. Last week's improvement has been lost as far as regards American varieties, which can scarcely be wondered at when it is remembered that the visible supply is 21,000,000 bushels and the shipments to the United Kingdom for the week ending the 15th inst.,

nearly 120,000 qrs. Until these enormous figures begin to show signs of a material reduction, there appears to be little ground for anticipating any rally of importance in prices. A leading feature of the present season is the unusually low point to which maize has fallen, and in spite of such prices as 21s. 6d. to 21s. 9d. per 480 lb. ex ship for mixed American, there have been no signs of a revival demand, as the consumption of this valuable feeding corn is still far below an average. Barley has been neglected, as there has been little inquiry either for malting or grinding sorts, and oats remain in a depressed condition, notwithstanding the moderate supplies and concessions which holders are willing to offer. The sales of English wheat noted last week were 50,341 qrs., at 40s. 8d., against 31,161 qrs., at 48s. 11d. in the previous year. The London averages for the week ending March 22nd were 40s. 11d. on 2,065 qrs. The imports into the United Kingdom for the week ending March 15th were 814,667 cwt. of wheat, and 143,607 cwts. of Flour. There was a good attendance of millers and country dealers at market on Monday last, but, notwithstanding the moderate imports, business relapsed into quietude, and the tendency of prices was slightly in buyers' favour. The wheat trade was especially dull, and very few sales were made either of English or foreign until late in the day, when some retail demand sprung up, needy buyers having to satisfy their requirements. The week's arrivals of home-grown wheat amounted to 3,340 qrs., and, although the quality of the samples left something to desire, the general condition was more satisfactory. The supply fresh up on factors' stands were again light, and the previous Monday's currencies were repeated for fine lots; but there was very little inquiry for secondary qualities, and sales progressed very slowly. The total arrivals of foreign were 26,672 qrs., of which quantity 15,104 qrs. were from Odessa, 5,869 qrs. from American Atlantic ports, and the remainder from New Zealand. Business was mainly confined to the supply of the immediate requirements of country millers, the demand being of a retail character at an occasional decline of 6d. to 1s. per qr. on American descriptions, but there was a rather stronger tone apparent at the close of the market. The exports were 310 qrs., against 2,010 qrs. in the previous week. The supply of barley consisted of 5,199 qrs. of home grown and 6,296 qrs. of foreign. Very little attention was given to this article, and, in the absence of sales, prices could only be quoted nominally unchanged for both malting and grinding varieties. Maize, with an arrival of about 22,000 qrs., was unaltered in value, but, if anything, rather steadier. The imports of oats were 33,855 qrs., and the trade ruled very quiet at a decline of 6d. per qr. on Swedish and Petersburg varieties. On Wednesday the return showed 280 qrs. of English wheat and 24,760 qrs. of foreign. With brilliant weather and a very scanty attendance all branches of the grain trade at Mark Lane were

exceedingly dull, and prices the turn against sellers for wheat and spring corn. On Friday the supply had increased to 460 qrs. of home-grown wheat and 31,250 qrs. of foreign. The market was again poorly attended, but there was a rather better inquiry for wheat at 6d. to 1s. per qr. below Monday's prices. Oats were in improved request, at 3d. per qr. more money, but maize underwent no quotable alteration. The imports of flour into the United Kingdom for the week ending March 15th, were 143,807 cwts. against 263,236 cwts. in the previous week. The receipts into London were 15,634 sacks of English, and 10,520 sacks and 5,164 barrels of foreign. With a light retail demand business has ruled dull, and, although not quotably lower, prices have tended in buyers' favour. The week's arrivals of Beans were 11,271 cwt., and of peas 14,701 cwt., showing a decrease of 8,615 cwt. on the former and 1,436 cwt. on the latter. Both articles have shared in the prevailing inactivity, and, as very few sales have been made, no quotable change has occurred in the value of either. The deliveries of malt were 24,544 qrs. and the exports 1,439 qrs. There has been no fresh feature to note in this branch of the trade, as last week's currencies have been maintained, but buyers have come forward with reluctance. A healthy activity continues to animate the agricultural seed trade, and all the leading varieties have been in brisk demand at hardening prices. As farmers have been busy sowing, the supply of English red clover has fallen off, and, with favourable weather, a substantial advance may be looked for, as stocks are rapidly diminishing, while arrivals continue on a most limited scale. Trefoil has been largely dealt in at an advance of 1s. per cwt., and Alsike and white clover maintain a firm position. Spring tares are scarce and have met a ready sale, and rapeseed has advanced, but canary, hemp, and mustard remain as last quoted. The country markets have been fairly supplied during the past week, as farmers have found time to thrash pretty freely under the inducement of the recent advance in prices. Provincial trade has, however, been less active, but a fair amount of steadiness has prevailed, and in a few instances fine wheat has brought rather more money, while spring corn has remained quiet, and without material change in value. At Liverpool on Tuesday there was a moderate attendance of buyers at market, and wheat sold slowly at the previous Friday's currencies, which indicated a decline of 1d. per cental on the week. Flour moved very slowly, and barley, oats, and beans were in limited request at about late rates. Maize, white liberal supplies and a restricted inquiry, gave way slightly, new mixed closing at 4s. 6d., and old at 4s. 8d. per 100lb. The week's imports included 58,000 qrs. of wheat and 17,000 qrs. of maize. At Newcastle the grain trade has ruled quiet, and wheat has been the turn cheaper to sell. Flour has also eased slightly, and all feeding stuffs have evinced a declining tendency. At Hull and Leeds there has been a quiet demand for English, and foreign wheat at about previous prices, but spring corn has barely supported late currencies. At Edinburgh the market has been barely supplied with wheat and barley, both of

which articles have been in fair request at last week's prices. Oats have sold somewhat slowly by reason of the advanced rates asked by sellers for sowing purposes. Malting barley has improved 6d. per qr., and beans have sold readily at 1s. per qr. more money. At Leith during the early part of the week was very wintery, but a thaw has since set in, and the snow is rapidly disappearing. The arrivals of wheat and flour from abroad have been fair, and at Wednesday's market the trade was slow at nominally previous rates, although, to effect sales, a slight reduction had to be submitted to. Barley was the turn dearer, and seed oats sold readily, but maize and other descriptions of feeding corn ruled slow at about former values. At Glasgow the week's arrivals have been large of flour but moderate of wheat and maize. Business has ruled quiet throughout the week, and the tendency of prices has been against sellers. At Dublin the weather has been cold and wet, and there has been very little business passing in grain. Wheat and maize, with a limited retail demand, have been the turn lower to sell, but the concessions offered by holders have not attracted buyers. At Cork a more active trade has been done in wheat at an advance of 1s. per qr. but within the past few days the improvement has been barely maintained. The consumptive demand for maize is still much below the average, and a reduction of 2s. 6d. per ton has been necessary to effect sales. The arrivals at ports of call during the past week have been small, and the floating cargo trade for wheat has shown a declining tendency, especially for Ghirka sorts, which have receded in value about 1s. per qr., but with signs of increasing firmness at the close of the week. Several cargoes of white wheat have been ordered off by owners in preference to accepting off-coast bids. Arrived maize, owing to scarcity, has commanded very full prices, and there has been a better demand for forward shipment.

The following are the reports from Mark Lane during the past month:—

#### Monday March 3.

The arrivals during the past week have been:—English Wheat, 4,244 qrs.; foreign, 3,743 qrs. Exports, 2,272 qrs. English Wheat was again in short supply at market this morning and factors held for 1s. per qr. more money but the advance was only obtainable for the finest samples. Of foreign the arrivals were unusually light, and a steady consumptive demand was experienced at fully late rates for all except red winter American and fine Russian descriptions, for which an advance of 1s. per qr. on the week was obtainable.

Country Flour, 17,707 sacks; foreign, 6,580 sacks, and 8,908 barrels. The trade ruled quiet but firm for both sacks and barrels, and last week's currencies were fully maintained.

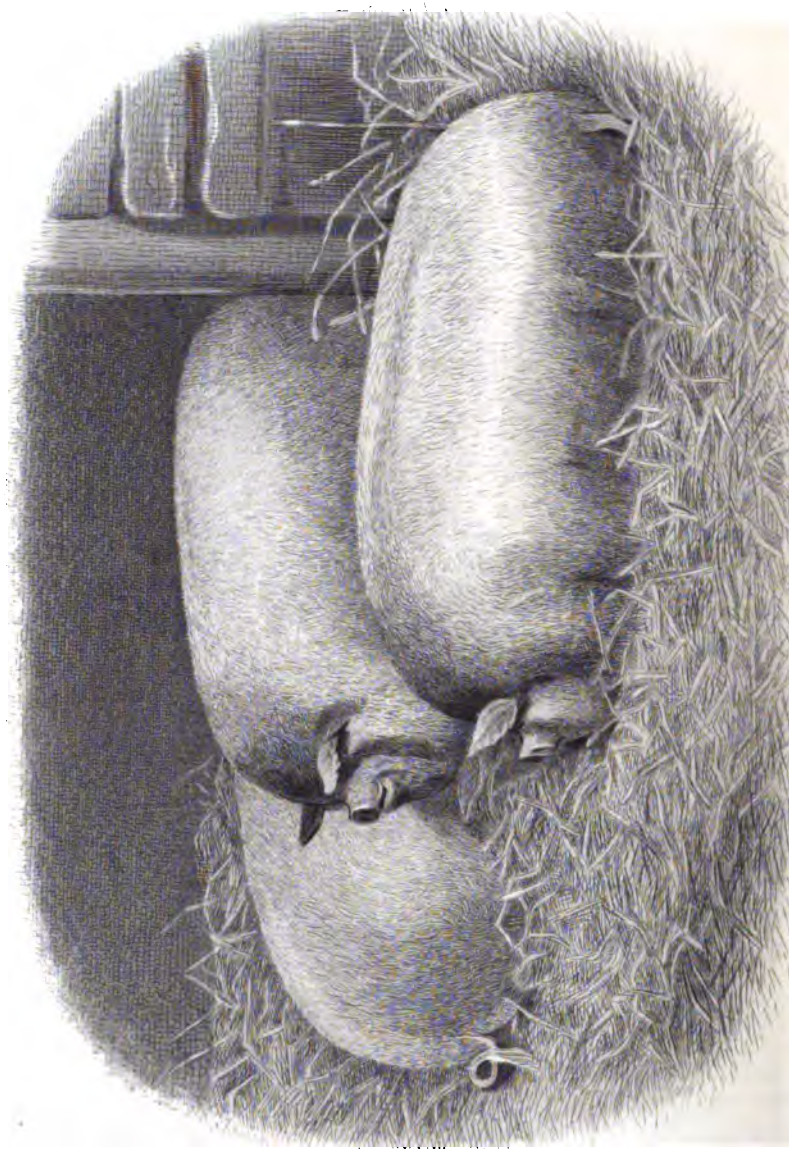
English Barley, 1,532 qrs.; Scotch, 2,108 qrs. foreign, 900 qrs. Malting varieties were steady, and grinding sorts slow, and with very little business passing in either, quotations were unaltered.

English Malt, 19,994 qrs.; Scotch, 1,199 qrs. Exports, 2,975. A slow sale for all descriptions at nominally late rates.

Maize, 41,936 qrs. Exports 469 qrs. Under pressure of continued heavy arrivals from abroad a weaker tendency was observable, and sales could only be effected at a decline of 3d. to 6d. per qr. on the week.







*The White Coteskull Breed.*

*A cat born in New York, about 1844, and was the first of the breed of White Coteskull Cats. It was bred by Mr. J. C. Coteskull, of New York.*

*It was the first of the breed of White Coteskull Cats.*



# THE FARMER'S MAGAZINE.

MAY, 1879.

## PLATE.

### THE WHITE COLESHILL BREED,

A CUP PEN AT THE S. O. C. SHOW, 1878, BREED AND FED BY THE EARL OF RADNOR,  
COLESHILL HOUSE, HIGHWORTH, WILTS.

In a good show of pigs the white breeds were well represented by pens from Her Majesty's farm, Windsor; the Duke of Marlborough's, Blenheim, Woodstock; the Earl Radnor's, Coleshill House, Wilts; the Marchioness of Camden's, Bayham Abbey, Kent; Major Bashford's, Crawley, Sussex; J. Saunderson's, Castle Carey, Somerset; J. and F. Howard's, Clapham, Bedford; and J. T. Homer's, Wimborne, Dorset. This is not the first Smithfield Cup the White Colehill breed, now famous in story, have carried off, and this year (1878) they take three first prizes, a second and a commendation as well. The prize pens were 16 months 17 days old, deep, compact pigs of nice quality, and make the best of bacon. Under the titles of real Wiltshire and prime Yorkshire many sides and hams change hands, though bred, fed, and cured in other counties. In fact pig breeding, feeding, and curing has

become a noble science, headed by her Majesty, so that bacon is now to be had almost as good in one part of the kingdom as another. And is there a man with soul so dead who hath not exclaimed on sniffing the fragrant morning rasher, or when out for a stroll far away from a rookery of chimney-pots, with an appetite sharpened by the best of all sauces, fresh air, on coming suddenly on the long-looked-for little wayside inn, and throwing himself into the open arms of an old Windsor chair, as the buxom landlady, having replied to his query of what can you give me to eat? without going through the popular farce of what would you like? returns in a few minutes, with a smile on her blooming cheeks and sleeves turned up on the roundest and fairest of arms, bearing a dish of delicious ham and eggs—Blessed be they who feedeth hogs!

## THE ECONOMICAL ASPECTS OF THE LAND QUESTION.

On Wednesday, April 11th, Mr. W. Summers, the Liberal candidate for Stalybridge, read a paper before the members of the Manchester Statistical Society on "The economical aspects of the land question in England." Mr. H. Baker presided.

Mr. SUMMERS said the present being a time of severe agricultural depression, it was of all others the time best fitted for an inquiry into the defects of our present land system, and for suggestions of reforms by which it was to be hoped these defects might be remedied. Famine in Ireland gave us the repeal of the Corn Laws, and it might be that the present

agricultural depression and distress would pave the way for the introduction of important reforms into the laws relating to land. The results of the inquiries which Mr. Bear had addressed to farmers in every county in England and Wales were such as to leave not the slightest doubt that the distress was general and not merely local in its character. During the ten years ending with 1878 there had only been one year, 1874, in which English farmers had been blessed with a specially good wheat crop, and only two others, 1870 and 1878, in which the crop had been a fairly average one. Similar conclusions resulted from an examination of the returns of barley, oats, beans, and peas. Farmers, moreover, had not only had



to struggle against poor crops; they had also had to contend with low prices. The explanation of this ill-omened combination of deficient crops and low prices was, of course, to be found in the fact that, thanks to our free-trade policy, foreign articles of consumption were admitted into our ports duty free. Whatever we might think about foreign competition so far as our trade was concerned, there could not be the slightest doubt that, as regarded articles of consumption, it was for the farmers a terrible reality, becoming more and more formidable with each succeeding year. While in 1857 we imported food grains and other articles of consumption to the value of £58,000,000, in 1877 the value of such imports had risen to the enormous figure of £160,000,000, thus showing that while the population had increased in twenty years only 17 per cent, the value of our food imports had increased 177 per cent. The imports of dead meat showed an increase between 1876 and 1878 of about 37½ per cent., and there were no grounds for believing that the future would witness any very considerable change. If the calculations of Mr. Wilson were to be relied upon, the Chicago farmer could deliver fresh meat in Liverpool at 5½d. per pound, while the English farmer could not sell at a profit at less than 7½d. per pound. Again, the farmers of the wheat-growing States in America could produce corn at 20s. per quarter. Reckoning the cost of carriage at 10s. per quarter it would be seen that the American farmers could grow wheat, send it to England, and sell it here at a price far below the net cost of production in our own country. If this were so, the American meat trade and export trade in wheat were yet in their infancy. Surely, then, it was high time for our farmers and farmers' friends to be bestirring themselves if we were not to be entirely beaten in the race. Where should we look for a remedy? To protection? Certainly not; we could not return to protection, for that would mean starvation, and nothing else, to a considerable portion of our population. A reduction of the wages of our agricultural labourers would deservedly be a highly unpopular measure, and would, moreover, bring with it little or no relief. A reduction of rents might become an inevitable necessity, but even if English farmers paid no rent at all it would still be possible for America to compete with them. The real remedy, therefore was to be found in high farming—farming upon the best and most scientific principles known, in the abundant and fertilising application of capital to the soil. Mr. Cobden said, "I believe we have no adequate idea of what the amount of production might be from a limited surface of land, provided only the amount of capital were sufficient." Lords Derby and Leicester had assured us that the produce of our soil might be doubled; and the experiments of such practical farmers as Mr. Mechi and Mr. Lawes seemed fully to bear out that statement. The capital invested by tenants in the land was estimated for the United Kingdom at less than £6 per acre. Mr. Mechi assured us that it ought to be from £16 to £20 per acre, as he told us it already was in some well-farmed districts. The landowners' capital was further estimated at £30 per acre, and this, we were also assured, ought to be considerably increased. The manner in which this additional capital might be expended was not difficult to discover. Much might with advantage be spent in drainage and in artificial manures. The fertilising qualities of artificial manures, such as nitrate of soda and the different phosphates, were only just beginning to be generally understood. The experiments of Mr. Lawes, however, were conclusive upon this as well as upon many other points of scientific agriculture. Taking soils of the same quality this gentleman had grown successive crops upon them with and without the use of artificial manures. Mr. Lawes found that the use of manures gave him a return of three times the weight of corn and four times the weight of straw that he obtained without them. In order that farmers might cultivate the land on truly scientific principles two things were necessary—they must be instructed in the principles of agriculture, and they must have full security for whatever capital they might invest in the land. The former object might be in part secured by the establishment of agricultural schools, similar to those in Germany and Switzerland; the latter could only be obtained by means of a thorough revision of our land laws. So long as the law of distress remained in its present anomalous and unjust state the credit of the farmer would never be so high as it ought to be, and the interests of agriculture would suffer accordingly. Another grievance from which farmers suffered to an incalculable extent was the over-preservation of game.

But the law of distress and the question of game preserving, important as they were, could hardly take rank with the still more vital questions of security of tenure and compensation for unexhausted improvements. Mr. Clare Head had stated that at the present moment more than one half of the agricultural land of England was held by tenants who were subject to six months' notice to quit, and who were without any right, either by custom or agreement, to compensation for unexhausted improvements. Others had put the proportion of land so held at the much higher figure of four-fifths of the whole. So long as this unsatisfactory state of things continued it could not be expected that the land would be cultivated to the best advantage. The farmer should be secured in the tenure of the land; he should not be liable to be turned out of his farm at the will of the landlord, or with a very short notice to quit. He should further be assured that he would himself get at least a share of the increased value of the land traceable to his own exertions; in a word, he should have what is known in Ireland as tenant right. The shortest and readiest method of securing the first of these objects—fixity of tenure—was by the system of leases. The evidence collected by Mr. Bright's committee, now more than 30 years ago, was conclusive upon this head, and there was no reason for believing that any improvement had taken place since the time when Mr. Bright's committee sat. An extract from Lord Hatherton's evidence, in which his Lordship narrated his own experience of the evils of game preserving, would not, perhaps, be out of place here. "I soon found," said Lord Hatherton, "as a farmer desirous of introducing among my tenantry, and into the neighbourhood, a better system of cultivation, that it was utterly hopeless to do so, unless I completely destroyed the hares; for the attempt merely to reduce was useless, for a good season repaired their numbers to such an extent that I found there was no effectual means but entire destruction. Without that I saw it would be hopeless to introduce upon the light lands those crops we ought to have, such as not only swede turnips, mangel wurtzel, carrots, vetches, but lucerne and other crops of that kind. I have consequently entirely destroyed the hares, or at least destroyed them as far as practicable, over 8,000 acres of my property, and I have also completely destroyed the rabbits. The result has been that I have not only been enabled to plant extensively without that depredation which formerly obliged me to replant covers perhaps two or three times; and it has not only enabled me to rear beautiful fences on a completely barren soil, but I have introduced the cultivation of those roots to which I have before alluded; and I believe that my tenants have found equal advantage from it since I have destroyed," continued his Lordship, "I perceive that there is infinite confidence on the part of tenants in their expenditure; and it has happened to me, within the last two or three years, to have received indisputable evidence of my character as a destroyer of hares, it having turned very much to my account in a better class of tenants having offered themselves for my farms when they have been vacant. I am quite confident that improvements of various sorts in the destroying of fences and the making of new fences, extensive drainage, and the introduction of other roots not hitherto cultivated, would not have been undertaken if they had believed that their improvements would have been subject to the former depredations of game." An admirable specimen of what a lease ought to be was to be found in full working order on Lord Leicester's Norfolk estate. Its terms were these: The tenancy is for 20 years from the 11th of October. It is to be terminable at the end of 16 years, at the request of the tenant and with the consent of the landlord; the intention being that, if both parties desire it, a new lease may be granted from the end of the 16th year for a fresh term of 20 years, at the old rent for the first four (which completes the original term), and for the remainder at such a rent as may be agreed on. The tenant is to cultivate and manage the farm during the first sixteen years according to his own judgment, and to dispose of the produce as he finds best. A power is reserved to interpose if this freedom should be misused. During the last four years, if a renewed lease is not entered upon, he is to bring the farm into the ordinary four-course or Norfolk system, with proper conditions of payment for unexhausted manures. He is to effectually destroy all rabbits on his farm, and other conditions adapted to local circumstances complete the arrangement. This lease, which might with advantage be adopted in every part of the United Kingdom, not only secured the farmer in his tenure of his farm, but by

the provision for the renewal of the lease at the end of the 10th year, did all that could be done to prevent that "b-g-ging out" of farms which was of such frequent occurrence as a lease drew near to its close. The economical advantages of leases were great, as they secured to the tenant fixity in his tenure of the land, and by diminishing risk tended to attract capital to the soil. The reason why the practice of granting leases had not long ago become universal in this country was not far to seek. The custom of holding land in very large estates, and as a source of power, quite as much as of profit—it was this that had fostered the vicious system, so prevalent in England and also in some parts of Scotland, of dispensing with leases. To remedy this abuse, however, we must look rather to the formation of a sound public opinion upon the subject than to the passing of any particular law. I was, for example, in the highest degree improbable that Parliament could be brought to look with any degree of favour upon a proposal to compel landlords to grant leases to their tenants. Still, without going to this extreme, the Legislature might very properly hold out inducements for them to do so. One very powerful inducement in this direction would be the recognition of much stronger claims for compensation for unwholesome improvements in the case of tenants-at-will than in the case of farmers holding under a lease. This was a distinction fully recognised in Mr. Gladstone's Irish Land Bill, and would probably form the basis of legislation for Great Britain; for a tenant-right that shall be a reality and not a sham was still a desideratum in this country, the Agricultural Holdings Act of 1875 having been practically a dead letter from the very first. What should be done, then, so far as tenant right was concerned, was that he should apply the principles of the Irish Land Act of 1870 to England and Scotland as well. The principle recognised by the law as just in the case of trade fixtures was surely just also in the case of fixtures in or upon the land. It was to the interest alike of landlord and tenant that tenant-right should be established, for it was to the interest of both that the land should be brought into the highest state of cultivation. Occupation in this way came to resemble ownership itself; and the one sovereign virtue of peasant proprietorship—the inducement to saving which it held out—was thus in some measure joined on to those special advantages which the English system of landlord, farmer, and labourer possesses over every other system. He said over every other system, because the English system of landlord, farmer, and labourer enabled the farmer to employ whatever capital he possessed freely in the cultivation of the soil, instead of being forced, as he would if he were a proprietor or forced, to expend a very considerable portion of it in the mere purchase of his landed property. Thus far he had dealt almost exclusively with the farmer and his grievances, and it remained for him to say a word or two on the position of the landlord. While the duty of the farmer was to provide himself with an adequate supply of manures, machinery, and labour, that of the landlord was to spend money freely in such large and costly works as drainage, farm buildings, and cottages. The landlord would be most likely to perform this duty if he were absolute owner of the land. It had, however, been estimated that 50,000,000 acres of land, or four-fifths of the United Kingdom, were in the hands of mere tenants for life, who were in no sense the real, but only the nominal owners of the soil. This vast area of land was, in fact, kept in bondage by the monstrous system of settlements that prevailed throughout the country. The various evil consequences springing from the English land laws, which permitted an owner to bind an estate by will or deed long after his death, had been thus summarized by the late Mr. Kay: (1) They prevented estates being sold which would otherwise undoubtedly come into the market; (2) lessened due parental control; (3) induced careless landowners to be tenfold more careless than they otherwise would be about the education of their children; (4) deprived many landowners of the means of properly managing their estates; (5) tended very greatly to retard the progress of agricultural improvement; (6) rendered it necessary to make the deeds and wills very long and expensive; (7) rendered it even very difficult and expensive for a purchaser to ascertain the state of the title of a plot of land he might wish to purchase; (8) often left the actual title of a plot of land uncertain, spite of all the labour and expense bestowed on its careful investigation. Here, too, then (Mr. Summers continued), a

thoroughgoing revision of our land laws is necessary. The laws of primogeniture and entail should be abolished, and very considerable changes should be introduced into our system of strict settlements. The limits within which a dead man's hand can govern the disposal of his estate long after he is no more should be materially curtailed. The settler of an estate might be limited to lives already in being at the time of the deed of settlement, or the practice of entailing land might be altogether forbidden, and nothing but absolute ownership, or what is technically called fee-simple ownership, of land permitted. In either case land would no longer be tied up and prevented from coming into the market in the way in which it is at present; and, inasmuch as landlords would then be in reality as well as in name owners of the land. In addition to the numerous reforms he had mentioned, we wanted an easier and cheap method of transfer, and a system of maps and registration of titles similar to those already in existence on the Continent. If these could be obtained, land would be more freely bought and sold than is now the case. Labourers would, moreover, have a greater incentive to exertion and to thrift, as it might then be possible for them to become themselves the owners of the land they till. There would not then exist to the same extent as at present a tendency for land to be monopolised by a few individuals. There would, in short, be free trade in land, and we should have estates of large, of middle, and, it may be, of small sizes alongside each other, the land coming to be divided in such lots and after such a manner as the influence of natural laws determined. We should be free from the evils of the French *morcellement* force on the one hand and from those which attach to the English system of an undue preponderance of very large estates on the other. It was, then, as he held, in the direction of free trade in land that we should look for any real and lasting improvement in our agricultural system, since it, and it alone, is capable of bringing about those natural and beneficent conditions that are absolutely necessary to all economical productions.

### THE TIPTREE BALANCE SHEET.

I believe that some people would be made happy if my balance sheet had unfortunately been unprofitable, but such folks must resign themselves to hard facts. My balance-sheets are not composed of ideas, but of hard money facts, and of true honest valuations made in accordance with the then market prices. My crops are, also, not hidden under a bushel, but are exposed at all times to all critics, adverse or friendly, who choose to inspect and value them. I am not to be envious by introductory compliments on my good nature, for although, thank God, of an even temper, I can fight a just battle quite as energetically and successfully as an ill-tempered person. Your correspondent, Mr. Garrett (who is a miller), appears to have collated and ground up in his mental mill, a most extraordinary hodgepodge of errors. He seems quite oblivious (he has evidently never read my book) that my land in its original unimproved state was let at 20s. per acre (which is the sum I paid during 30 years for a farm adjoining mine which I improved), and although I charge myself 40s. an acre now (including the fixed machinery and irrigation), he wants to charge it all over again. He will see that all my tradesmen's bills for repairs, millwright, &c., are fully debited (also £25 for reserve or repair), and he supposes that I ought not to credit money for rent of cottages, although I bought them with the farm. The fact is the complaint is so incorrect and unfounded that I must decline any further notice of it. As regards your more reasonable correspondent, "Worcestershire," if he has not visited my farm, I hope he will do so at various periods of the growth of my crops, and he can then form his own conclusions and comparisons, and my bailiff will explain to him all our ways. If he had read your admirable journal he would have seen my course of cropping, which oft and again has appeared in your columns, especially after my agricultural gathering of last year, held about middle of July. I am more and more convinced that there must be a great want of perfection in our agriculture, else why should my crops be a matter of wonder or surprise? When landowners put their land and buildings in a fit condition for profitable farming (and that cannot be done without additional investment of capital and increased rent), and when tenants will fill their land with ample manure, cultivate deeply, keep it clean,

abolish dung-heaps, and not sow excess of seed, they will no longer express surprise at my crops. I shall, I fear, begin to be vain if so constantly taunted with my great crops on such naturally miserable lands. And here let me protest most strongly against the absurd and mistaken outcry about laying down land to permanent pasture and growing less corn. Why, on this land and other poor land such an operation would be ruinous, and I know some extensive farmers who have been tempted to do so, and have lost their capital. Take, for instance, two of my best wheat fields this bad season. The one near my garden (they were all examined by all my visitors in July) was of Taunton Dean wheat (white). It yielded a fraction over 5 qr. per acre, sold at Colchester at 53s. per qr. The straw was bound and sold at once— $3\frac{1}{2}$  loads per acre, at 30s.

5 qrs. at 53s. ....	£13 5 0
$3\frac{1}{2}$ loads of straw, at 80s. ....	5 5 0

£18 10 0

Then another field, rather beyond the other, but of Golden Drop red wheat,  $6\frac{1}{2}$  qrs. per acre; but deducting inferior, 3 qrs. per acre were sold at 46s.

6 qrs., at 46s. ....	£13 16 0
Straw, at 83s. per load of 36 trusses	6 3 6

£19 19 6

The Taunton Dean was grown after clever, once mowed and then folded. The Golden Drop was after peas, picked for market, and followed by purple top turnips, folded with sheep, both same year, 1877. As the turnips were a large crop, the field was not sown with wheat until January 21, and being late we put in nearly 2 bush. per acre. It was sold immediately after harvest. What would have been the worth of permanent pasture on this poor land composed of many soils of a 1 colours, and, unless I drained it, a reservoir of spring and top water? But what would become of the labourer with permanent pasture on such a soil? Certainly not 20s. per acre, and now my manual labour was 23 per acre. A friend of mine, who managed a fine estate in Northamptonshire some 35 years ago, told me that the price paid for sheepherding on that good grass land was 1s. 6d. per acre! The contract was usually made with a man who had others under him. Well may the labourers be in excess on permanent pastures, for if the fields cannot multiply they do. But take a good season, and see what wheat will do. In 1868 I averaged 7 qrs. per acre on 40 acres. One field (Willow Field) yielded 8 qrs. per acre of white Clubheaded Rough Chaff, and I sold it at once at 63s. per qr. :—

8 qrs., at 63s. per qr. ....	£25 4 0
Straw ....	4 0 0

£29 4 0

(The fee simple of the land only cost £25), and then to follow I got  $7\frac{1}{2}$  qr. of Rivetts. Don't tell me about permanent pasture on poor land, that would naturally grow farse, broom, and heather, which abound on our adjoining heath, left to nature. I must say again and again, "Read my book," in which you will find all these matters fully stated, for at 77 I cannot be always repeating, and it will soon be time for my departure. In the cause of progressive agriculture—which means food for the people—I labour with love; but I see with deep regret that British agriculture is still enthralled by ancient and unprofitable customs, difficult to change, either on the part of landowner or tenant. Book farmers (but not in Scotland) were the ridicule of agricultural society; but the better educated American farmer and labourer are making their superior intelligence felt in competition with British agriculturalists. By the way, I forgot to say that my barley (which was grown after wheat) yielded an average of  $4\frac{1}{2}$  qrs. per acre, sold at 51s. per qr. Thick sowing and late harvesting and laid barley crops lost to British agriculture an immense total. My barley after wheat, with about 6 pecks per acre, is generally an upstanding crop, and of good quality. I don't consider last year a good one, for my large breadth of wheat only averaged just over 4 qrs. per acre, and barley  $4\frac{1}{2}$ —which is considerably under my usual average. My area under peas was 25 acres. In conclusion, I think that after fighting the battle for 35 years, I am entitled to retire (I must leave the question of laurels or no laurels to the "great public"). I feel that I have done my best.—Replies to queries by H. A.

(p. 136).—1. £15 per acre. 2. Farm cost £25 per acre; landowner's improvements, draining, buildings, &c., also about £25 per acre; rent fixed 40s. per acre. 3. No new implements. 4. £25 is an ample reserve for repairing implements, in addition to tradesmen's bills.—J. J. MARCH.

## THE SCOTTISH CHAMBER OF AGRICULTURE AND THE HYPOTHEC BILL.

The following is the text of a petition which has been prepared by the Scottish Chamber of Agriculture for presentation in the House of Commons, relating to the Hypothec Bill :—

That the Hypothec Abolition Bill at present before your Honourable House, as amended in Committee, contains a clause which gives Parliamentary recognition, for the first time, to an illegal and unconstitutional exercise of legislative power assumed by the Court of Session in Scotland in the middle of last century.

In 1756 the Court of Session passed an Act or Statute on the following preamble :—"Whereas the difficulties that have occurred in actions of removing from lands have been found to be highly prejudicial to agriculture, and both to masters and tenants, in respect that, during the dependence of such actions, the lands are neglected and deteriorated by the defaulter, and the heritor's security for his rent brought into danger; and tenants are discouraged from entering into tacks, by the uncertainty of their attaining to possession, and by their finding the subject of their tack much deteriorated, during the dependence of the process of removing against the preceding tenant."

This Act contained the following enactments, among others :—"Where a tenant hath irritated his tack, by suffering two years' rent to be in arrear, it shall be lawful to the heritor or heritor to declare the irritancy before the Judge Ordinary, and to insist in a summary removing before him; and it shall be lawful to the sheriff or steward-depute, or their substitutes, to find the irritancy incurred, and to decern in the removing, *any practice to the contrary notwithstanding*."

"Where a tenant shall run in arrear of one full year's rent, or shall desert his possession, and leave it unlaboured at the usual time of labouring, in these, or either of these cases, it shall be lawful to the heritor, or other settler of the lands, to bring his action against the tenant before the Judge Ordinary, who is hereby empowered and required to decern and obtain the tenant to find caution for the arrears, and for payment of the rent for the five crops following, or during the currency of the tack, if the tack is of shorter endurance than five years, within a certain time to be limited by the judge; and, failing thereof, to decern the tenant summarily to remove, and to eject him in the same manner as if the tack were determined."

The imperative order thus made on the local judges (the sheriffs or "judges ordinary") has been necessarily obeyed by these inferior magistrates, and has been enforced by the Court of Session under its judicial powers; but these enactments have never till now been submitted to or sanctioned by Parliament.

The judges of the Court of Session took in a report to one of the branches of the Legislature, on 27th February, 1810, questioned whether this act was not *ultra vires* of their predecessors.

And the Lord President, in the case of *Graham v. Gordon* on 16th June, 1843, then judicially before the Court, said—"Whether the Act of Sederunt 1756 did not go beyond the powers of the Court has been questioned, but as it has been acted on for nearly a century, we must give obedience to it. We will not, however, go beyond the practice under it."

For more than half a century after the legislative Union of England and Scotland, an idea seems to have prevailed among the judges of the Court of Session, that extraordinary powers had in some way devolved by necessity on them through the cessation of the Parliament and Privy Council of Scotland. A learned writer of last century made this apology for the Court :—"These and the like extraordinary powers were proper to the Privy Council of Scotland while that Court subsisted; and if they were not now transferred to the Court of Session, there would be a defect in that part of our constitution, and many wrongs would be without a remedy." Is exercise of these assumed powers, the Court fixed the price of victual, meddled with the importation of grain, made statutes

as to the registration of deeds and bills, issued fulminations against profanity (offering to receive anonymous information against offenders), enacted that rioters should be "incapable of managing affairs of any sort" for three years and thereafter till reposed by the Court; regulated the price of candles and the quality of wax to be used in Scotland in sealing with the Royal Signet, and the mode in which "butchery meat" was to be cut up, and the proportions of fat and bone to be sold with it, "on pain of confiscation and 25 Scots for each offence;" and sent a bery of brewers to prison (who had given up brewing as unprofitable) till they bound themselves to carry on their trade. Within a few months after passing the Act which has been brought by the authors of the Hypothec Bill under the notice of your Honourable House, a representation was made to the judges of the said Court of Session that there was a scarcity of oatmeal in the market of Edinburgh, owing to "the tenants not thrashing out their oats in order to save their fodder;" whereupon their Lordships intimated in one of their Acts "that in case the farmers of this county shall prove refractory, and shall not comply with the reasonable demands of their respective heritors, that it is the duty of the Justices of the Peace—and they are sufficiently authorised by law—to compel those within their county," possessed of oats, to contribute their proportions, such being the recorded ideas of the position and rights of tenants which were held by those who enacted the above recited laws of eviction, it is humbly hoped that your Honourable House will see ground to examine closely into the equity and policy of their legislation before adopting it. For in the assertion of such powers they did many things of a non-judicial character (showing how far they had then gone out of their legitimate province); which extravagances, except the above-mentioned Act, commonly called an Act of Sederunt, have long been obsolete, and known to have been unwarranted usurpations. Indeed, the 19th Article of the Act of Union, 6 Anne, chap. 14, had settled that the Court of Session was to have only "the same authority and privileges as before."

The Act or Statute of the Court of Session, to which the promoters of the Hypothec Bill ask your Honourable House to give your recognition, through an obscure proviso introduced in Committee, was not only illegal in its foundation, but is exorbitant and unjust in its requirements, even as these are limited by the Bill.

The present Bill adopts it, and in one most serious article exceeds it in severity to tenants, for the Bill, in substance, enacts that whenever even a half-year's rent falls due, the landlord, without using the ordinary means of recovery provided by law—without notice, and without asking payment—may compel the tenant to find good security, not only for what he owes, but for two years' rent in advance; and, if he fails to find such security, may have the lease broken and the tenant at once evicted. Your petitioners submit to the judgment of your Honourable House—1, Whether the introduction into the Bill, when in Committee, of a recognition by the House of such a bastard claim to legislative powers, is consistent with the privileges of the House and the order of its proceedings? and 2, Whether the conditions of eviction which the Bill proposes for breaking unexpired leases are just and reasonable in principle, and fit to be countenanced by the Imperial Parliament?

Your petitioners humbly represent that such an extreme measure is not necessary for any fair or legitimate object. No man ought to be permitted to put in force such an engine of oppression without at least ample notice, and the failure to recover his claims through the ordinary processes of law. These are sharp enough without additional severities. For the Bill has been applied by its authors to future leases only; and every regular lease in Scotland contains a clause under which the tenant can be charged to pay his rent in six days, and on failure his goods may be seized summarily or he may be sent to prison.

The demand for two years' security for future rent (in addition to the rent already due) is excessive, and is one which few tenants could be expected to meet. A landlord who should obtain good security for one year's rent in advance, in addition to what is owing to him, could run no substantial risk. For he could always repeat his action, and obtain new security if farther rent should fall in arrear after the next year's rent had been paid under his securities, and the costs of such repetition would be fairly laid on the tenant if caused by his repeated default.

Your petitioners further represent that it is due alike to justice and sound policy that, when a lease is compulsorily broken under a law of this kind, the tenants' improvements and unexhausted manures should be taken into account and valued over to the landlord, the landlord taking payment of the rent due, out of the first of it. If this shall not be provided, the Bill will be a great barrier to the free use of manures during the whole term of a lease, and a very serious discouragement to good farming.

The Bill also threatens to introduce a new practice—eviction during the currency of a year's possession. It can hardly be conceived to be the intention of the Bill that the landlord should appropriate the tenant's growing crops. And yet there are no provisions for enabling the evicted tenant to continue the works of tillage, &c., which, in green crops especially, are necessary during their growth, to obtain a crop.

If extraordinary powers of action are given at all, it should be provided either that the decree of eviction shall take effect at the end of the year's tenancy or at the very least that the tenant on giving security for the rent up to that time should be entitled to remain till the close of the year. In every case he should be entitled by law to have ample time to obtain securities.

As if the provisions of the Bill which your petitioners have noticed were not sufficiently stringent, there has been superadded in Committee a clause which, by reference to the Act of Sederunt and by greatly enlarging its application, enacts that whenever a year's rent falls due the landlord shall be entitled to have the lease broken and the tenant evicted, without giving him the chance of finding securities. In the case of rents which are payable yearly, a landlord or factor might on the afternoon of the term day, or on any day afterwards, apply for the tenant's immediate extrusion; and in this enactment, as the other, there is no provision for notice or demand in of payment or previous resort to the ordinary remedies of law, nor any recognition of the tenant's property in his improvement and unexhausted manures.

So inconsiderate indeed is this Bill, that it literally enacts that, whenever six months' rent is due and unpaid the landlord shall have "the same rights" against his tenant as when twelve months' rent is due; and when twelve months' rent is due shall have the same rights as when two years' rent is due; which, though probably not so intended, is capable of being construed to mean, that whenever rent falls due it shall be doubled.

Your petitioners have also to represent that the Repeal of Hypothec will be very incomplete, and deprived of much of the economical, commercial, and social advantages derivable from its repeal, if the operation of the Bill is deferred in the case of each farm till the expiry of its existing lease. In amendments of the general law it has been usual, and it is desirable, to have a fixed time known to everybody for commencing their operation all over the country, and not to defer their action to suit the desires or interests of each individual. Under the Bill, as it stands, no person except the landlord and tenant could know with certainty, for nearly nineteen years (it may be, indeed, for a much longer period) whether or not this law was applicable to any particular farm. All the disadvantages would remain from which farmers suffer in their credit, and many of the disadvantages from which traders suffer in their dealing.

When general laws have been passed, which transferred burdens from landlords to tenants, no consideration was had for existing leases. This was the case with the Poor Law Act, the Road Acts, the School Rates, and many others.

Even in the Hypothec Amendment Act of 1867, though it cut off rights of hypothec to a large extent, no suggestion was made to postpone its action till the end of each lease.

Nor was the slightest consideration given to the tenant's interest under existing leases, when, in a mere procedure bill for the Sheriff's Courts, an enactment was passed in 1853, by which the notice for removing a tenant whose lease expired at Martinmas or Candlemas was cut down to forty days in all, instead of what had previously been the legal term of notice for such cases—six months besides forty days in the case of the Martinmas tenant, and nearly nine months besides forty days for a Candlemas removal. Even the above Act of Sederunt itself was applied without mercy and without reservation to tenants who had existing leases when it was passed. Nor can any trace be historically shown of refinements for exempting tenants under leases in existence when hypothec was

originally brought into use. But, indeed, the Bill goes far beyond the retention of hypothec during leases that are now in existence. It actually reserves to every landlord the power from this time till 11th November, 1880, of making new leases, which, by the mere fact of being made prior to that date, shall retain to them their right of hypothec during their whole endurance. It moreover sets no limit to that endurance.

Your petitioners therefore pray your Honourable House to amend the Bill in the particulars herein set forth, or if that is not done, then to reject the Bill; and your petitioners, as in duty bound, will ever pray.

J. M. NICOLL, *President.*  
D. CURRIER, *Secretary.*

Edinburgh, April 16.

## CHEMISTRY APPLIED TO AGRICULTURE.

Professor Fairley, in a lecture on "Chemistry in its application to Agriculture," delivered before the York Chamber of Agriculture on March 20th., traced the history of agricultural chemistry from 1752, when the discovery of carbonic acid by Dr. Black, of Edinburgh, first indicated the close relation between chemistry and agriculture. The growing plant was a complex living machine having numerous wants, and in which a great number of processes went on together. It received heat and light from the sun, and so obtained the energy requisite to decompose the carbonic acid of the air, and to draw up moisture containing saline and other mineral substances from the soil, building them up into its own substance and into the seed required to continue its species. The greater number of plants contained a large preponderance of water, which they derived chiefly from the soil or from the moisture of the atmosphere in the form of rain. The solid material of plants was chiefly derived from the carbonic acid of the atmosphere, while only a small percentage was really taken from the soil, and this was represented by the ash and the nitrogen. The latter came to the plant in the form of ammonia or nitric acid partly contained in the soil, but probably originally derived from the nitrogen of the atmosphere. Hence, if a crop were grown continuously on the same land, the grower would be in the position of a man who in his yearly expenditure not only used the interest of his capital, but a part of the capital as well, so that sooner or later the process came to an end. So that it was absolutely necessary that the proportions contained in the soil of mineral constituents contained in the ash of a plant of nitrogenous compounds which assisted in forming the nitrogenous materials found in the plant must be maintained, and that not only in relation to the amount of these substances contained in the crop, but also to make up for leakage by drainage waters, &c., from the land. A proper knowledge of his soil was necessary to the successful farmer. The percentages of silica, alumina, lime, magnesia, soda, potash, sulphuric acid, phosphoric acid, and other constituents, might be the same in two soils, and yet they might vary considerably in fertility, the one having the crop-producing substances in a more soluble or available form than the other. Also soils might have the same composition and yet vary much in their absorptive powers, and hence in the benefit they might receive and retain from the addition of particular substances as manure, especially in regard to nitrogen. In marked contrast to this property of soils in regard to ammonia was their feeble attraction for nitrates. Many considered it likely that the ammonia was oxidised in the soil before being taken up by the plant, just as he could show them by experiment with the platinum in a flask over ammonia, either the slow oxidation as in ordinary burning or combustion. In the slow oxidation especially, the products were the same as in the soil. The ammonia was oxidised into nitric acid or a nitrate. Now it was found that in the application of ammoniacal manures to land from one-half to nearly two-thirds of the ammonia disappeared. It was neither to be found in the crop nor in the soil, but an examination of the drainage water revealed the secret. It had changed into nitrates, for which the soil had no absorptive powers faster than the plants could assimilate the latter. It was also found that as a nitrogenous manure nitrate of soda was often more powerful than an ammoniacal manure containing the same proportion of nitrogen, but it must be applied not in the

autumn before, but in the spring when the crop could use it, otherwise it was in great measure wasted. In modifying the properties of soils liming was one of the oldest practices. In the addition of lime to a soil, it might either act as manure, supplying what was deficient, or it might act in virtue of its chemical properties. Lime was a caustic substance, and if the soil was charged with decayed organic matter, giving a habitat to slugs and vermin, the addition of lime powerfully assisted the decomposition of such organic matter. If the soil contained potash, but locked up in a form scarcely available to the plant, lime would help to liberate it. Soils were complex mixtures, containing many chemical compounds, and perhaps so two were exactly alike. Every manure must be considered not merely in relation to the crop, but also in relation to the soil to which it was applied, and the problem was one of almost infinite variety. The farmer should seek to know the soils he manipulated upon, as a man studied the character of his dearest friend. There was a certain relation between particular substances used as manure, and the plants stimulated to grow thereby. Speaking generally, phosphates stimulated the grasses and those parts concerned in the production of seed, whilst ammoniacal manures stalk and the leaf. In turnips and similar biennial plants the root was really a store of nutriment for the seed in the second year, hence the very great efficacy of dissolved phosphates in growing root crops. Soot was chiefly to be regarded as an ammoniacal manure, and certainly should be valued only as such. It was he believed, difficult to obtain genuine specimens of this manure. Of a number of samples sent to him to be analysed he had not found any two alike. He believed soot from coal was richer in ammonia than that from wood. Of pea soot he had had no means of forming an opinion. Soot varied in value from 21 to 23 per ton, calculating the ammonia at 15% per unit. Dissolved coprolites were 3s. 3d. per unit, and neutral phosphates and potash were about 2s. per unit each. It was best to sell straw at a bad price than waste it on the farm, especially when by its sale other food more valuable in its manurial residue could be bought for stock feeding on the farm. Selling straw in large towns gave opportunity of taking back equivalent in farm or stable manure. There was much waste in the storing and collecting of farm-yard manure, especially where concentrated feeding stuffs were used. Such manure was worth careful storage as much as any artificial manure of the same value. Unless there was prevention of loss by drainage, or the animals were fed on the land, considerable but uncertain deduction must be made in the value of the manure. Of all the concentrated cattle foods, decorticated cotton cake was that which gave the greatest value in the resulting manure. Next came rape cake and linseed cake and undecorticated or whole cottonseed cake. For maintaining stock and land in fair condition, a judicious use of these more concentrated foods was best; and for fattening stock, few foods could compare with good palm meal in value. Cocoa-nut cake, locust beans, and the various starchy foods were also much used in addition to the food raised on the farm. Peas and beans were also concentrated foods, and where grown and sold off the farm, except so far as they sometimes answered a useful purpose in the rotation of crops, he should not consider them to be restorative. Much would, however, depend on the manuring of the land as to whether it was better or worse after growing these crops. The chief difference between raw and boiled bones was that the latter were most active. The action of bones was similar to that of a dissolved phosphate, but slower and more lasting. The cause of clover sickness on land was believed to be the removal of certain necessary constituents by the too frequent growth of the crops on the same land. Of these the salts of potash and the proportion of available silica (that was silica that could be assimilated by the plant) were most important. Mr. Lawes's experiments as to the necessities for permanently maintaining the growing power of land showed for wheat about 12 cwt. per acre containing one part kainit of potash salts, one part superphosphate, and one and a half parts of ammonia salts; and for barley the same, but about half the proportion of ammonia salts, or in place of it nitrate of soda. On very light sorts rape cake manure would no doubt advantageously replace more or less of the ammonia salts.

A variety of questions were put to the lecturer of a technical character, after which a vote of thanks was passed to the lecturer. The lecture was illustrated by a number of experiments.

## Agricultural Table Talk.

The members for East Suffolk, Lord Rendlesham and Colonel Barne, and those for South Norfolk, Sir R. J. Buxton and Mr. Clare S-well Read, attended a market tea at Beccles on May 18. Mr. J. H. Orde presided. Lord Rendlesham said the deplorable depression in agriculture was a subject of all-absorbing interest to the owners and occupiers. The supreme causes were four bad seasons, and the exceedingly low price of wheat. In fact that cause might go further back to the time when our flocks were devastated by the cattle plague. His Lordship quoted a number of statistics to show that there was in 1878 a considerable diminution in cattle and sheep in comparison with 1873. Another cause of depression was that the price of wheat was lower than it had ever been in the present century, the reason being the enormous importation of foreign wheat. How the Americans sold the wheat at prices now ruling he could not imagine, seeing that an average crop was thirteen bushels per acre. He was told that England was their only market, and they were compelled to sell. The increasing importation of wool from Australia and of cattle from America, were also sources of anxiety arising from the free trade policy which we had adopted, and which he supposed we must keep to. He was glad to hear of a glimmer of revival in trade in the North, for he feared the existing depression, by decreasing consumption, affected the farmers. At present it seemed doubtful whether some land would be worth cultivating. At all events investment in land would not be very profitable. The question arose, what the landlords could do to assist the tenant-farmers. And his Lordship said he could only look on the interests of landlords and tenants as one. Reduction of rent had been suggested, and although he had not given a general reduction, he had been glad to assist in cases where it was necessary. There was no doubt that competition a few years ago forced rents up to a fictitious level. Another suggested remedy was freedom of cultivation, which he considered to the landlord's interest to grant, for he could hardly conceive that a strict adherence to the four course shift could be profitable. To the sale of roots, also, he saw no objection, but as to selling straw and hay he had offered to allow it in some cases, and he found that farmers said they generally found a use for them. The labourers' wages had been a source of great trouble to the farmer; they had risen higher, whilst the amount of work done for the increased wage had diminished. As one means of enabling the farmers to make better terms with the labourers, Lord Rendlesham suggested that the landlords should, where possible, provide good cottages close to the farms. If the landlords made concessions and effected improvements the tenant-farmer must do his best to keep the rates down, and in this way landlords and tenants could struggle on till better times.

Colonel BARNE, in responding, observed that there were gentlemen on the other side of politics who were doing their best to place discord between landlord and tenant but the fact was, both were in the same boat, and if one sunk, the other must sink too. Farmers had been losers from bad harvests during the last five years. The question he should like to hear discussed and answered was this, that supposing we had a succession of five good years, was farming going to answer then? If not, then the farming and agricultural interest in England was doomed. If this depression was going on, the land would have to be put on a new value. It was already said that rents were falling through the natural law of supply and demand. That was true, but there were men whose ancestors a long way back had lived on the same farm, and who, rather than leave that occupation, would suffer their right hands to be cut off. If there was to be a reduction of rent, these men ought to have their rents reduced in the same way as those who came newly upon a farm. What agriculturists required was some material change before they could be put into the position they occupied 20 years ago. It must be remembered that if rents fell rates must fall in proportion. Supposing rents to fall materially, how were the landlords to build farm buildings and new cottages? There was one matter which he might mention. The tithes were commuted at a time when agriculture was in a more flourishing condition than at present. He knew a farm, the rent of which was £100, on which the tithes were commuted at £60. The tithe was supposed to be one-tenth of the produce of the land, the produce of a farm was generally supposed to be three times its rental.

Therefore the produce of £100 a-year farm would be £300, and one-tenth of that would be £30, but £60 would be one-fifth. The tithes appeared to be based upon too high an average price of corn.

## THE HYPOTHEC SHAM.

Under the above heading Mr. W. Goodlet, of Bolahan, writes to the *Scotsman* :—

Those members of Parliament who pledged themselves unreservedly, at their election, to the abolition of agricultural hypothec, should consider how far they are keeping their pledge, in spirit or letter when they, by vote or absence, promote a bill whose characteristic feature is to leave under the lash of that law the whole of the existing body of farmers, to whom they gave the pledge.

To illustrate this, we may take a prominent case.

When Mr. Vans Agnew was proposed as candidate for Wigtownshire, he, at Newton-Stewart, in January, 1873, made the following declaration :—

"With reference to the law of hypothec, you have been truly told that it has no effect in this county. It is of no use to landlords; I do not feel it to be the least security in this county. But other counties are differently situated. I agree with those who believe that the time for it has gone past, and as far as it relates to crop and farm stock, I would be glad to see it abolished for I believe that the purpose would be served by the English law of hypothec instead of the Scotch law."

Immediately afterwards a large meeting of farmers, held at Stranraer, passed a series of resolutions, and communicated them to Mr. Vans Agnew, inviting him to declare whether or not he would accede to them. The first resolution was in these terms :—

"That the law of agricultural hypothec ought to be totally abolished, and that the substitution for it of the English law of distress would be intolerable."

On the 22nd January Mr. Vans Agnew answered that he would take an early opportunity of stating his views at a meeting of electors at Stranraer. On 31st January he made this public declaration to that meeting :—

"The first resolution refers to the subject of agricultural hypothec, and that, as I stated at Newton-Stewart, is unnecessary for the landlord, and as it is a cause of irritation to the farmer, I am not prepared to maintain it in any way. (Cheers.) I stated before that I would be glad to see agricultural hypothec abolished. (Loud cheers.) I stated in my address that I should not be sorry to see the English law of distress substituted for it. It has been stated by my friend, Mr. McNeel Caird, and by the Lord Advocate that if I knew what the law of distress was, I would not have said so. (Laughter.) I believe these gentlemen never said a truer thing in their lives. (Cheers and loud laughter.) I did not know the terms of the English law of distress. (Renewed laughter.)"

A few days later at a meeting of electors in Glenluce, Mr. Miller, an elector, asked a further declaration on the subject.

Mr. AGNEW said : "I am prepared to agree to a measure that shall abolish agricultural hypothec, but not urban hypothec."

Mr. MILLER : "Without any substitute?"

Mr. AGNEW : "Without any substitute."

It is a grave but not a difficult question of public morality, whether or not such pledges have been faithfully kept.

**THICK SOWING.**—A farmer writes in the *North British Agriculturist* of April 1, that he gets a better crop of oats from sowing 12 bush. of oats per Scotch acre (1½ imperial acre) than from 8 bush. Now as I only sow 2 bush. of oats per English acre and as an average get forty for one, and sometimes more than that, our Scotch friend ought to get 480 bush. per Scotch acre! From the sublime to the ridiculous there seems to be but one step. I presume that the 12 bush. per Scotch acre are sown broadcast and probably in a high late district which requires early maturity, but it is an astounding quantity and a very costly addition to the other charges on the farm. He also sows 4 bush. of wheat per Scotch acre—three times as much as I sow.—J. J. MURRAY.

## ARTIFICIAL MANURES.

At a special general meeting of the East Kent Cham ber o Agriculture, held at the Guildhall, Canterbury, on Saturday March 22nd, Mr. Basil Hodges in the chair, Mr. Bernard Dyer, F.C.S., A.I.C. (consulting chemist to the Devon County Agricultural Society, the Notts Chamber of Agriculture, &c.), of 17, Great Tower Street, London, read a paper on "The Analysis of Artificial Manures, and the buying and using them to advantage; with some Observations on the unexhausted value of Feeding Stuffs."

After some preliminary remarks on the relations of scientific research and practical agriculture, Mr. Bernard Dyer described briefly the nature and composition of the various artificial manures in general use, including nitrate of soda, sulphate of ammonia, dried blood, shoddy, fish manure, superphosphate, bone dust, dissolved bones, special compound manures, Peruvian guano, potash salts, etc., mentioning the more common kinds of adulteration practised with regard to each by unscrupulous dealers in spurious manures. Numerous instances were given of such adulterations, which had recently come under the immediate notice of the lecturer, who stated that he had several times of late analysed manures sold at 28 per ton which turned out, on analysis, to be only worth a few shillings. He specially warned his hearers against the rubbishy articles which were being constantly palmed off in Kent among the hop growers under the name of shoddy and wool dust, rags and refuse fibres of all sorts being frequently sold at the price of good shoddy, or wool dust, which on analysis scarcely yielded any nitrogen worth mentioning. The practice of adulterating manures had greatly decreased of late years owing to the exertions of the analysts, but it still flourished more or less in most parts of the country, a fact which was greatly to be deprecated, not only on account of the injury caused to the pockets of the farmer, but also on account of the annoyance it caused to the majority of the manure manufacturers who were for the most part honest men, and who often had a great deal to contend with in competing with unscrupulous dealers who attempted to undersell them by offering adulterated goods, and who necessarily reflected a great deal of unmerited disgrace upon the whole trade. An upright dealer was generally willing to have his wares submitted to the test of analysis, and the most satisfactory way of doing business was for the farmer to ask for a written guarantee that the manure he was buying was of a definite quality, or strength, and to submit a properly drawn sample to a competent chemist for analysis. In case of the article being inferior to the guarantee—which even in the most straightforward transactions would sometimes occur by oversight, or accident in mixing the manure—the matter could then be satisfactorily arranged on the basis of the analysis. It was only the rogue who salted his nitrate of soda, and limed his bone dust, that shrank from analysis, and regarded the chemist as a natural enemy. The term "pure superphosphate" which was often used to lead farmers astray, had no real signification, as it might be applied to manures containing 20 per cent. and to others containing 40 per cent. of soluble phosphate. All such manures should be explicitly sold as containing a certain minimum of their principal fertilising ingredients. There were many kinds of bones in the market—varying from raw bones to the highly steamed bones which constituted a refuse product of the glue-maker. All were valuable, but their value differed very materially, and it was so easy to substitute an inferior for a superior kind that it was seldom safe to buy bone dust except on analysis. The lecturer did not consider that the term "dissolved bones" as used in commerce ought to be considered as denoting a mixture of bones and acid and nothing else; if sold as "pure dissolved bones" there should decidedly be no other material present; but the mixtures usually sold in the trade as "dissolved bones" were often, for certain reasons which he enumerated, more convenient to the farmer than the pure article. He certainly held that bones should in all cases form the basis of such manures, but he also held that the addition of some mineral superphosphate, and of a little foreign nitrogenous material was of little consequence, provided that the manure contained a proper guaranteed percentage of soluble phosphate, insoluble bone phosphate, and nitrogen equal to ammonia. Some persons objected to the sale of such mixtures under the name of dissolved bones, but the term was well understood in the trade, and though not literally accurate could scarcely, in

his opinion, be now-a-days regarded in the light of a deception. As he had already said, if pure dissolved bones were required they should be specially bargained for. Peruvian guano was alluded to at some length, the lecturer drawing attention to the system under which the guano now imported was sold by the present con-ignees, the Peruvian Guano Company. The price of every cargo was fixed according to its composition as obtained by analysis, and the farmer therefore could now buy guano at a rate proportional to its comparative value. He (Mr. Dyer) had recently analysed some very fine specimens of Peruvian guano brought within the last two or three months from the Guanape Islands. He wished particularly, however, to warn farmers of a danger that often arose in buying guano from dealers instead of directly from the agents of the company. This was the temptation which existed to a not ever honest trader, to buy the cheaper kinds of guano, and to retail it at the price of a superior article—merely guaranteeing it as "genuine." When buying indirectly, therefore, the farmer should always insist upon having a sample analysed in order to see that, if paying for high-class guano, he really gets it. The system of fixing the price according to analysis was one which the Peruvian Government had done well to sanction, as it was calculated to bring back guano into good repute in the eyes of the farmers, many of whom had formerly given up its use owing to the uncertainty of its composition and its inconsistently uniform price. After some remarks on the method of drawing samples for analysis, and also on the question of the valuation of manures, which he frankly stated was one in which such complexities often arose that the chemist could not in the majority of cases give an off-hand opinion as to money value—the lecturer referred briefly to the best methods of distributing manures in the field. He then proceeded to point out the general principles which governed the value of the manurial residues of oil cake and other feeding stuffs, referring to Mr. Lawes' well-known tables of valuation, and Dr. Voelcker's proposed modification of the same. Then, as, in his (the lecturer's) opinion, practically little difficulty in fixing the compensation to be paid to an outgoing tenant or the unexhausted value of oil-cake, &c. given to sheep feeding off roots on the land itself, provided, proper proof were afforded that the quantity claimed had really been so utilised. But where cake was consumed in the farm yard the matter was far more complex. Very few farm yards were properly constructed and kept in proper order. If anything like the whole of the manurial value was to be regained, the yard must be covered in and the dung-heap protected from rain; and there must be properly constructed gutters to collect the liquid drainings from the stalls into a suitable liquid manure tank; and after all these precautions, the manure must be carefully carried on to the field and properly spread. All these circumstances formed formidable difficulties in the way of valuing the residual manure of feeding stuffs, and it was obviously unreasonable for an outgoing tenant to expect much compensation for his outlay in oil-cake, if the greater part of the unexhausted value had already been squandered into the gutters and ditches instead of feeding its way on to the land. Satisfactory farm yard arrangements of course required capital, which, however, was a question to be settled between landlord and tenant. Many agriculturists would do well to pay attention to Mr. Mechi's oft repeated exhortations on the economy of the farm yard, and to lay to heart some of the excellent precepts of this energetic veteran friend of the British farmer.

After some discussion, the proceedings terminated with votes of thanks to the lecturer and chairman.

**CATTLE DISEASE.**—Several cases of disease among cattle have occurred recently in the Leightonstone Division of the county of Huntingdon. Nineteen pigs on the farm of Mr. William Deat, at Ellington, were attacked with typhoid fever, of which four died and the rest were killed. The whole of the flock of sheep on the farm of Mr. W. H. Gibbons at Molesworth, 225 in number, have been reported to the local authority to be affected with sheepscab. A cow belonging to Mr. G. Armstrong, at Little Stakesley, was attacked with pleuro-pneumonia, and was slaughtered at once.



## SWISS AGRICULTURE.

The Geneva Correspondent of the *Times* writes under date April 12:—

"It may be some slight consolation to the agriculturist of England to know that they are not alone in their misfortune and that their cries of distress have found a sympathetic echo in a country so far away and so differently situated as Switzerland. Letters have lately appeared in many Swiss papers bearing a striking resemblance to those on this subject which have been printed in the *Times*, and one of your leaders and Lord Huntly's recent speech in the House of Lords have been translated and much commented upon by some of the principal journals here. The complaints of Swiss agriculturists have reference less to bad seasons and short crops than to dear labour and foreign competition. Young men, they say, do not remain in the country as their fathers were wont to do; they prefer the life of towns, they wander away to other lands; wages, as a consequence, have risen, while the prices of agricultural produce have fallen. The warehouses of Romanhorn are crowded with Austrian and Hungarian corn and flour, and even the *Heusegen* (bountiful hay harvest) of 1878 has proved a doubtful blessing, for milk is selling in North Switzerland at 11 centimes the litre (equal to about 1d. for  $\frac{1}{2}$  pint) and butter at 10d. per lb., and heavy importations of American cheese have made the home cheese business a losing business. An attempt was lately made to introduce the beetroot culture into canton Aargau, and it was proposed to turn the monastery of Muri into a sugar factory; but when the matter came to be thoroughly investigated, under the direction of Dr. Kramer, of Zurich, a great authority in agricultural matters, it was found that while the highest price obtainable for the root was 1f. per cwt., it could not be grown under 1f. 30c. to 1f. 60c. the cwt., so the project had to be abandoned. It is rather remarkable that, while the English farmers are complaining of the effects of game laws, Swiss farmers are suffering greatly from the absence of similar enactments, and the inevitable extermination of small birds which comes of free and promiscuous shooting. True, most of the cantons have lately passed laws prohibiting *la chasse* during certain months of the year, but, as yet, the balance of nature is far from having been restored, for a Swiss 'sportsman' kills every live thing he sees that is neither human kind nor strictly private property—jacks, thrushes, robins, sparrows, and even hedgehogs and owls—and the 'hunter' who rolls over a fox is as proud of his achievement as the Indian shekary who puts a bullet through the head of a Bengal tiger. One notable consequence of this indiscriminate slaughter is that some districts are every autumn literally overrun with field-mice. In one commune of Zurich alone 60,000 of these pests were killed last autumn, and the *Maikafer* (May-beetle) have greater terrors for the Swiss farmer than either dear labour or foreign competition. The damage they do is enormous; individual communes have been known to pay as much as 4,000f. in premiums for their destruction in the course of a single year. In 1876 the district of Meilen (Zurich) paid in this way 6,000f., and the *Maikafer* caught and destroyed measured 1,040 hectolitres (23,880 gallons). Birds are justly considered to be the most formidable foes of these destructive insects, and it is significant of the importance which is beginning to be attached to their preservation in Switzerland that the Swiss Society for the protection of animals has just addressed a Latin letter to Leo XIII., imploring him to use his great influence in favour of the birds 'masacred in enormous quantities in Italy and elsewhere, to the great detriment of agriculture.' The Society are of opinion that a solemn exhortation from his Holiness will have a more powerful effect than either the warnings of the press or the terrors of the law. The letter will be forwarded to the Pope through the intermediary of the Federal Chancellor.

"Much has been written of late in the *Times* and elsewhere touching enterprise in agriculture, and the style of living practised by English farmers. In these respects Switzerland is the antithesis of England. Whatever other advantages small properties may possess, they do not, so far as this country is concerned, appear to develop a spirit of enterprise in those who own and cultivate them. Reaping, mowing, or haymaking machines are rarely seen in Switzerland, and though winnowing machines are in common use, so, also, are the thrashing-floor and the flail. Old-fashioned ploughs requiring

the services both of ploughman and driver, and often of a small boy are still in vogue, and the methods of tanning are generally slovenly and backward. But it must be admitted that what these people lack, in enterprise they make up for in thrift, and that, despite their slowness and the antiquity of their ideas, they have the keenest of eyes for the main chance and a wonderful knack at money making. It often happens that peasant proprietors, whose outward appearance indicates a condition bordering on poverty, and who, together with their wives, work harder than any of their hired servants, are worth in flocks and herds and real estate 25,000 or 28,000, to say nothing of savings banked and out at interest. But, with the exception of such pleasure as the sense of ownership bestows, their lives are hard and joyless, and there are probably few persons who would not prefer the life of an English farmer, with his hunters, his sherry, and his piano, even with his present troubles thrown in.

"With a view to lightening the pressure of hard times and in the hope that they may thereby secure a constant supply of cheap bread, the people of Zurich, or rather a part of them, are proposing to make the State a dealer in grain. They desire, in fact, to establish in their canton the system which wrought so much evil in France in the last century, which was denounced by Turgot more than 100 years ago, and abolished at his instance in 1774. A law carrying out this idea has been prepared and will be submitted to the popular vote a few weeks hence. It will be interesting to watch the fate of this project, for, by a grotesque coincidence, its promoters, who are among the most advanced politicians, are at the same time the strenuous supporters of the *Cularkampf* and ardent opponents of the restoration of the punishment of death. This party, though at present rather under a cloud, is still very powerful, and its ideas may be an important factor in the political future of Switzerland."

## THE ROYAL AGRICULTURAL SOCIETY AND THE ROYAL DUBLIN SOCIETY.

A meeting of persons interested in Irish farming, and favourable to the amalgamation of the Agricultural Department of the Royal Dublin Society with the Royal Agricultural Society, was held at the Shelbourne Hotel on April 17, to consider the proposals of the government respecting the future status of the Agricultural Department of the Royal Dublin Society, and the probable effect on the improvement of Irish agriculture on the adoption or rejection of these proposals.

Lord Talbot de Malahide took the chair. The following resolutions were passed:—

Proposed by Lord MONCK, seconded by Earl of ROSS, and carried unanimously,—"That in the opinion of this meeting the creation of a comprehensive society for the improvement of Irish farming by the union of the Agricultural Department of the Royal Dublin Society with the Royal Agricultural Society is most desirable, and would greatly conduce to efficiency economy, and convenience of management."

Proposed by Lord POWERSCOURT, seconded by Lord NEWRY, and carried unanimously:—"That the occasion of the reconstitution of the Royal Dublin Society appears to this meeting to offer a suitable opportunity for carrying into effect such a union on the basis suggested by the report of the joint committee of the Royal Dublin Society and the Royal Agricultural Society, as approved of at general meetings of both those societies."

3. Moved by Sir THOMAS BUTLER, and seconded by Mr. L. TUTTENHAM—"That this meeting desires to express a hope that the Royal Dublin Society will feel itself able to come to an arrangement with the government respecting the provision of accommodation for the agricultural department of the society, inasmuch as this meeting is of opinion that such an arrangement, coupled with the union of the societies, would tend greatly to promote the advancement of agricultural improvement in Ireland."

4. Moved by Mr. CHALONER, and seconded by Mr. MADDIX—"That a committee, consisting of Lord Talbot de Malahide, Lord Newry, Lord Cloncurry, Mr. Samuel Garnett, Mr. R. Walsh, and Mr. Fether-tonhaugh, be appointed to wait on the councils of the Royal Dublin Society and the Royal Agricultural Society, and to impress on those bodies the opinions expressed in the foregoing resolutions."



## A RECTOR'S COMPLAINT.

"M." writes to the *Standard* :—

Doubtless many thousands have read the articles and correspondence which have appeared from time to time in the *Standard* on the subject of agricultural depression—I might say its ruination—with a very keen interest. Experienced men, whose life-time has been spent in farming, appear to be as much at a loss to know how to act for the best as one forced by circumstances to take to it late in life. For not a few the question is solved by their bankruptcy, whilst others, in order to save what they can from the wreck, sell off everything and give up their business.

Perhaps there are no greater sufferers than those situated as I am, viz.—the rector of a parish, whose sole endowment is a glebe of two hundred and seventy acres of heavy clay land, two-thirds of it arable, exhausted at the time of the enclosure for the tithes. This was "farmed for leaving" several seasons before it was ceded in the autumn of 1877; and I was obliged to give back the chief part of the half-year's rent, by "the custom of the country;" and unless I went to law could get no compensation for bad cultivation.

I have tried in vain to let the farm, which is little to be wondered at, as so many are in the market owned by "county people," who can give leases and other privileges which I cannot. Whilst I have had little to sell, it has taken nearly all my private means to get it into cultivation so far as I have done, and now the prospects are so bad that I fear I shall not get back half my outlay, to say nothing of losing all rent. I tried last year to get some remission of income-tax, as there was no sort of emolument, and the result has been that I am now charged in addition, under Schedule B, as occupier, on the estimated rental. Under this heading I have paid more than the total profits of my benefice in the last three years.

A terrible alternative seems to be placed before me—either to break up my home of sixteen years, and go almost penniless on the wide world, with wife and six children, or else stay on, hoping against hope, till the benefice is sequestrated for liabilities that I cannot meet.

THE ROYAL DUBLIN SOCIETY'S  
SPRING SHOW.

(Abridged from the *Irish Farmers' Gazette*.)

The arrival of Easter, clad in the snowy garb of Christmas, did not betoken auspicious weather for the Show week. On the Tuesday morning, when the Show opened, the weather was bleak, wet, and unpromising, but as the day wore on it began to improve, and since that time it was cold and dry. The attendance was fair, but we have seen the yards more crowded than they were at this time.

## SHORTHORNS.

On looking through the section of yearling bulls for the first time on Tuesday morning, we confess we felt disappointed in the general appearance of the animals; but a more minute scrutiny showed that, although there were no remarkable "plums" in the section, still there was a considerable number of useful animals which fairly redeemed the section from mediocrity. There were, no doubt, a number of "culls"; but this was not more than might be expected in a section which numbered no less than 143 animals. It was not difficult to pick out a score or thirty of the best of the lot, but it was the placing of the best that gave the judges trouble; for several young bulls were so equally matched that it was almost a toss up which was the better animal. When the figures were at last put up those who had been looking on outside the ring were, on the whole, well satisfied. The Earl of Caledon has been an exhibitor in Kildare-street for many years, with fair success; but it was the first time that a representative of the Caledon herd was placed at the head of the poll, and it affords us much pleasure to record the fact. General Roberts, Lord Caledon's first prize yearling, is a neat,

nice-looking bull, very good in the back, with good touch, and well turned all over.

The aged bull section comprised 18 entries, amongst which were several animals which have been distinguished at previous shows. The first prize in the section, and the Chaloner Plate as the best bull in the show, of any breed, over two years old and under six years of age, was awarded to Mr. McClinton Bunbury's Anchor, bred by Mr. Chaloner, which was the winner of the plate last year. Anchor retains his grand style, and looked remarkably fresh. His breeder and his owner have both great reason to be proud of him; for he is certainly about the best bull ever bred in Ireland. Mr. Hanon's St. Ronan was again put second to Anchor. This is another really grand bull, and he has kept his position well from the first.

The yearling heifers formed, as on many previous occasions, the cream of the show, and the judges marked their sense of the excellence of the section by a special memorandum of approval. The first prize was again won by Mr. Gumbleton—on this occasion with his heifer Cassia, descended from the Castle Grove Coquette. Cassia is a very stylish heifer—good in the crops and in the back, well filled at the heart, deep and rich in the flank, has plenty of substance, and is all through a top heifer. The second prize was awarded to Mr. Wise's Empress of Fame, by Mr. Downing's Great Fame, and from a dam descended from the Ardferg Abbey herd. She is a neat heifer, but might be sweeter in the touch.

The first prize in the section of three-year-old heifers was awarded to Mr. Taaffe's Snowflake—a heifer of great substance, which was first in her class at the Galway Royal Show. Lord Courtown's Baby was marked as having "merit;" but not sufficient, we suppose, for the second prize.

In the cow section Bates' blood was victorious, Mr. Cope having won both first and second prizes. The first prize cow—Baroness of Raby—is a very stylish animal, and deserved her place; but we confess we did not expect that the second prize would have gone to Raby's Landress, which was not only in low condition, but wanted substance and style; which, especially substance, existed in a marked degree in Mr. Taaffe's Daisy the Second, which was highly commended.

In the section of two-year-old heifers Mr. Gumbleton's Emma Oponox was first. This heifer was first in the yearling section at last year's Spring Show, and has improved wonderfully since that time.

Thirty-six two-year old bulls made a good display in point of numbers, and the section contained several valuable animals, irrespective of those which were specially noticed by the judges. The first prize was awarded to Major O'Reilly's Prince of Song, by the late Mr. Barnes' Grand Prince, from a dam by King Richard the Second, and going back to Lamp of Lothian blood. Major O'Reilly's bull has great substance and good flesh. Mr. Richard Reynell succeeded in getting the second place with his bull Agamemnon, by Mr. Booth's Lieutenant-General, from a dam of the Westland Sweet Brier family, by Mr. Booth's King James. This is rather a stylish bull, with good flesh; a little slack behind the shoulder. The third prize went to Mr. Hannan's Imperial Lind (40016), by his breeder's grand prize bull St. Ronan, from a dam of the well known and valuable Jenny Lind family, of which Mr. Hannan has many excellent representatives in his herd at Riverstown. Imperial Lind has good hair, rich flesh, and is well turned behind.

The Hereford breed was not largely represented.

As usual, there were not many entries of polled Angus cattle; but as that breed is gradually gaining ground in

Ireland, it is to be hoped that by-and-bye the breed will be more numerously represented at our shows.

There was only one Ayrshire cow—a very nice one—which belongs to Mr. J. D. Paul.

We have seen a much larger turn-out of Kerries at the Spring Show. Bulls of all ages compete in one section; whereas there ought to be at least two sections for bulls.

Fat cattle were not so numerous as usual at the Easter Show, and were not quite up to the mark of former years in point of finish. The Herefords, however, were very superior, and this may also be said of some of the short-horns, particularly the Duke of Leinster's three-year-old heifer, which was not only a very sweet animal, but remarkably even and well-finished. She won the special prize as the best of all the prize heifers.

There was a fair show of swine, and the quality in the coloured breed was over the average.

## PRIZE LIST.

### BREEDING CATTLE.

#### SHORTHORNS.

Bulls, calved in 1878.—First prize, Earl of Caledon (General Roberts); second, Earl of Erne (Jack Tar); third, W. Charley (Lord Beaconsfield); fourth, Earl of Caledon (Lord of the Isles).

Bulls, calved in 1877.—First prize, Major O'Reilly, M.P. (Prince of Song); second, R. Reynell (Agamemnon); third, B. Hannan (Imperial Lind).

Bulls, calved in or prior to 1876.—First prize and cup, T. K. McClintock, Bunbury (Anchor); second, B. Hannan (St. Ronan).

Heifers, calved in 1878.—First prize, R. J. M. Gumbleton (Cassia); second, C. W. Wise (Empress of Fame).

Heifers, calved in 1877.—First prize, R. J. M. Gumbleton (Emma Opoponax); second, W. Scott (Brilliant).

Heifers, calved in 1876.—Prize, J. P. Taaffe (Snowflake).  
Cows.—First and second prizes, J. A. M. Cope (Baroness of Raby and Raby's Landress).

#### HEREFORDS.

Bulls, calved in 1878.—Prize, G. N. Pardon (Besique).  
Bulls, calved in 1877.—Prize, N. G. Pardon (Neptane).

Bulls, calved in 1876.—Prize, G. A. Stephens (Royal Duke).

Bulls, calved in or before 1875.—Prize, Major Kearney (Turro).

Heifers or cows, in calf or having had a living calf within twelve months.—Prize, Major Kearney (Cherry Blossom).

#### POLLED ANGUS.

Bulls.—First prize, W. Owen (Black Knight); second, L. McGuinness (Sir William of Belleek).

Heifers or cows.—Prize, W. Owen (Nannie the Third).

#### KERRY.

Bulls, equal.—First prize, J. Robertson (Border Chief) and T. Butler; second, A. Bole (Mountain Loo).

Heifers, calved in 1877.—Prize, Earl of Clonmel.

Heifers, calved in 1876.—Prize, Earl of Clonmel.

Cows.—First prize, Earl of Clonmel; second, J. Robertson (Black berry).

#### DEXTER.

Bulls, any age.—First prize, Earl of Clonmel (Kerry Re-cruit); second, J. Dunne.

Heifers, calved in 1877.—Prize, G. A. Stephens.

Heifers, calved in 1876.—Prize, J. Robertson (Iresine).

Cows.—First prize, equal W. G. Henry and Colonel Sir R. Palmer; second, Earl of Clonmel.

#### ALDERNETS.

Bulls.—Prize, G. Keogh.

Cows.—Prize, G. A. Stephens (Lady Alice).

#### FAT CATTLE.

#### SHORTHORNS.

Oxen, calved before 1876.—Prize, Major Kearney.

Cows, any age.—First prize, Earl of Caledon (Rhoda); second, T. K. McClintock (Clara).

Heifers, not exceeding four-years-old.—First prize, Duke of Leinster; second, S. Garnett.

#### HEREFORDS.

Oxen, calved in 1877.—Prize, Major Kearney.

Oxen, calved before 1876.—Prize, Major Kearney.

Cows, any age.—First prize, J. C. Walahe (Duchess); second, R. W. Reynell.

Heifers, not exceeding four-years-old.—Prize, J. C. Walahe.

#### KERRYS.

Heifers, not exceeding four-years-old.—Prize, Earl of Clonmel.

#### ANY OTHER VARIETY.

Oxen.—First prize, S. Garnett; second, R. W. Reynell.

Cows.—Prize, H. P. Truell.

Heifers.—Prize, Earl of Longford.

#### BREEDING PIGS.

#### COLOURED.

Boars, six months and not exceeding twelve months old.—First and second prizes, Lord Clermont.

Boars exceeding twelve months and not exceeding twenty-four months old.—Prize, Lord Clermont.

Boars, exceeding twenty-four and not exceeding thirty-six months old.—Prize, Viscount de Vesci.

Sows.—First prize, Lord Clermont; second, Earl of Erne.

Three pigs.—First prize Lord Clermont; second, Miss F. G. Bell.

#### WHITE.

Boars, six months and not exceeding twelve months old.—First prize, J. L. Naper; second, Earl of Clonmel.

Boars exceeding twenty-four, and not exceeding thirty-six months old.—Prize, T. Butler.

Sows.—First prize, J. Molloy; second, Earl of Wicklow.

Three pigs.—First prize, J. Molloy; second, Earl of Clonmel.

Litter of not less than six pigs.—First prize, Earl of Clonmel; second, J. Molloy.

## LIVE STOCK NOTES.

Anent the subject of imparting fresh vigour to the Shorthorn breed of cattle, comes a paragraph from the *Banffshire Journal*, in which it is stated that Earl Tankerville, with that object in view, is trying the experiment of crossing Shorthorns with the wild white cattle of Chillingham Park; the renovating material, *Bos Scoticus* (?)—which is supposed to be more nearly related to the extinct *Bos primigenius* than any other existing breed of cattle—being nearer at hand and, presumably, more to his lordship's taste than *Bos Americanus*, recently alluded to in this column. There can be little doubt but that fresh vigour may be obtained in this way; but an increased tendency to black or brown noses and black tips to horns—which is now quite prevalent enough amongst Shorthorns—together with the addition of red ears, might not be regarded in the light of an advantage. There may possibly be another balance to be struck between a gain in point of style and "grandeur" and a loss in respect of docility and early maturity. However, that remains to be seen. The paragraph alluded to is as follows:—"The company present at the let of the Chillingham grass parks last week had an opportunity of inspecting a fine young bull, half-bred, from the celebrated Chillingham wild white cattle. To the experiment of crossing this 'untamed, unmixed, and unstained stock' with the Shorthorns we already alluded, the object in view by the Earl of Tankerville being to impart fresh blood and constitution to the Shorthorns. The first cross was between a wild bull and two Shorthorn heifers, one of which calved in June 1877 a very fine heifer calf, pure white, with grand coat of hair, white muzzle, and red tipped ears. In the same month the other heifer produced a bull calf which is more of the wild type. It has a brown muzzle and spotted nose, black eyes and black eyelashes, and red tipped ears; it is also a white, and has splendid coat of hair. One of the heifers has since produced, to her own son, a bull calf, a perfect beauty, being pure white, with white nose, red tipped ears, a fine coat of hair, and good shape. It is intended also to cross back with two of the wild heifers."

Some few weeks since comment was made in this column on a statement which appeared in the *American Stockman* to the effect that it had been said that "a pig which has once passed through the Chicago Stock-yards never afterwards has a sound hoof," and that Journal now explains that the remark was "intended as a figurative one." Figurative of what? On referring to the extract we find that it goes on to say "there is authority that the yards on the margin of the Missouri are more easily cleaned, and are now likely to be in good condition than the yards in Chicago. The enormous extent of the latter—covering with their road, tracks, and sheds, an extent of 870 acres—almost precludes the idea of cleanliness. They can accommodate 20,000 head of cattle at once, and the sales often amount to 4,000 or 5,000 a day. Where such an immense business is done the tendency to the neglect of even the ordinary presentations must be great." Just so; but what is it that affects the soundness of pigs' hoofs, even figuratively speaking? For the *American Stockman* now declares that it is "not aware that anybody ever heard of any disease of their feet," in America, of course.

Since writing the above we have received the *National Live Stock Journal* of Chicago, in which appears an editorial statement that the story about the pigs is "simply nonsense, and has no foundation whatever. It is purely a creation of the brain of some irresponsible newspaper scribbler." And at this point we are content to leave the matter.

Although the American press has been unanimous in deprecating the embargo laid on their export cattle trade, as likely to affect injuriously the newly-developed industry to the detriment of the country, the *New York World* is now disposed to regard the matter in a different light, and says "the cattle and beef exporters of this country can well afford to wait for the demand in Great Britain for our beef to open British ports. There is neither reason nor necessity for begging the privilege of furnishing fresh meat to English cotton spinners for less than it is furnished to American lock-makers." Then why has all the noise been made? The *American Stockman*, in commenting on this statement of the *World*, which it endorses, remarks that "the battle is to be between the British farmer and the English consumer of meats and not between the latter and the American producer." But why should the American producer care aught about an export trade if it is unremunerative? There will be no battle between the English producer and the English consumers, but there will be one between British farmers and British landowners or the Legislature which is the same thing. But on any question relative to the importation of food products.

The *Toronto Mail* of the 28th ult. states that the Allan boat Manitoba is to take the first shipment of cattle for the United Kingdom from the port of Halifax. The *Mail* goes on to say "this shipment will demonstrate the advantage of Halifax as having a shorter sea voyage, and will be the first of a large and important trade which merits every attention. The scene near the Richmond railway station just now is a lively one. The old horse car stables have been converted into temporary quarters for the large drove of Canadian cattle imported for shipment to England. The line of railway as far as can be seen is alive with men and teams and freight cars, contrasting strangely with the lack of business in town." But where are the cattle to come from to supply a "large and important trade?"

With regard to the importation of stud stock to Australia the *Sydney Mail* says:—"The quarantine arrangements of the Victorian Chief Stock Inspector do not afford satisfaction to would-be importers. The proposed charges

in connection with the quarantine are said to be exorbitantly high, and the rules which importers are to follow so absurdly framed that they almost amount to a prohibition. Few persons will assert that the measures adopted in this port (Sydney) to exclude stock diseases are not sufficiently strict. Yet it would seem that they are liberal when compared with those of Victoria, and we are informed that several Victorian breeders intend to ship their stock from England for Victoria via Sydney. This course, doubtless, will be as disagreeable to the importers as it will be onerous to our Stock Department. It was not intended that Sydney should be the quarantine ground for Victoria, and we hope that the authorities of our sister colony will not permit the Victorian Stock Department to indulge in vagaries which would bring about such a unsatisfactory state of affairs. . . . We have favourable reports from the stock quarantine station on Shark Island. The score of animals located there are in healthy condition, and show no greater advantage now than when they landed. Properly, but few persons are allowed to visit the island, and no one is allowed to land if not accompanied by the inspector. . . . Mr. Yeo's imported cow Duchess of Dennington, at present in quarantine in Shark Island, on last Friday week dropped a fine heifer calf by Tempter. We are further informed that all the quarantine stock are in fair condition and quite healthy."

We have recently alluded to the absence of any report from the Cattle Truck Committee, and in reference to the same subject Mr. B. Mead, of Aylesbury, writes to a contemporary as follows:—"Seeing the Royal Agricultural Society offer a prize of £50 and a gold medal for the best wagon for conveying perishable goods by rail, I should be very much obliged if you will allow me to say that in the late competition for railway cattle trucks, held at South Kensington nearly twelve months ago, no reward has been made or any report whatever issued. I trust that in the forthcoming competition, should no award be made, exhibitors will at least have the satisfaction of reading some report on the relative merits of the exhibits sent in." We hope so to.

Increase in noted herds of Shorthorns has been published as follows:—In the Holker herd, the property of the Duke of Devonshire: February 19th, white bull calf, sire 7th Duke of Gloucester, dam Grand Duchess Oxford 32nd; March 15th, red heifer calf, sire 7th Duke of Gloucester, dam Winsome 4th. In the Underley herd, the property of Lord Bective: February 20th, roan bull calf, sire Lightburne's Duke of Oxford 22nd, dam Water Lass; March 1st, red bull calf, sire Lord of the Isles, dam Cherry Check; March 3rd, roan heifer calf, sire Furzeoman, dam Butterfly Princess 2nd; March 10th, red-and-white heifer calf, sire Duke of Underley, dam Lady Weston; March 27th, roan heifer calf, sire Duke of Underley, dam Marchioness 6th. In the Kilhow herd, the property of Mr. S. P. Forster: Roan heifer calf, sire Duke of Ormakirk, dam Wild Eyes Lassie 2nd.

**POPULATION OF THE COLONY OF VICTORIA.**—The estimated population of Victoria at the close of 1878 is stated in the *Government Gazette* at 879,386—namely, 478,311 males and 401,075 females. These numbers show 10,579 males and 8,029 females more than at the end of the preceding year.

**EXTRAORDINARY OUTRAGE ON CATTLE.**—Two valuable cows having died suddenly at a farm at Alagat Asaburb, near Burslem, foul play was suspected, and a post mortem examination arranged. The doctor now reports the presence in the stomachs of a quantity of hair-pins, metal buttons, shots, bullets, and nails, which have been forced down the animals' throats. No clue has been discovered as to the perpetrators of the outrage at present.—*Echo*.

## PRINCIPLES OF AGRICULTURE.

TO THE EDITOR OF THE MARK LANE EXPRESS.

Sir,—The remarks recently made by Professor Church at the Cirencester Chamber of Agriculture, carrying with them as they do the respect due to a person of his acknowledged eminence, are liable to be misapprehended by many who are taking an active interest in the Principles of Agriculture. I am therefore reluctantly compelled to make reference to them.

Professor Church, speaking of the system pursued by the Government Department of Science, is reported to have said—"There are three defects which have always impressed me as of serious import," and these are subsequently specified as follows:—

1st "We have included in this subject a crowd of sciences applied to the art of agriculture. Here is some botany, a good deal of geology, not a little mechanics and physics, and a large amount of chemistry. But who may be, and are examined in this subject?—this subject which can only be successfully studied after the elements of these foundational sciences have been mastered. Why, young men and lads who need not have had, and in most cases have certainly not had, any instruction in these sciences."

2nd. "Where are fit teachers of the Principles of Agriculture? Where are the men who in twenty or thirty lectures can apply all the sciences to the most complex of arts, that of farming?"

3rd. The lack of acquaintance with actual agricultural materials, which must necessarily be the case with many teachers and students. Can you expect the poor fellow" (the science teacher) "to master the mysteries of superphosphates, or even to distinguish a good from a bad guano?"

In reference to the first objection I may remark that without doubt the Principles of Agriculture can be more completely understood when their duty rests upon a prior acquaintance with the "foundational sciences" named, but the numbers are exceedingly small who can secure this advantage, whilst the million can only expect to gain useful information on a more limited scale. An individual may accustom himself to consider that he cannot dine unless he has six, seven, or more courses prepared for him, with wines and liqueurs "en suite." Another man may make a good dinner if he had a sirloin of beef, with vegetables, and a pint of sherry. A third may have to be content with some bread and cheese and a glass of beer, or possibly with less. Few would consent to go without food because they cannot command the banquet which some consider a necessity. Admitting then, that Professor Church is right in his views of the requirements for attaining a tolerably complete knowledge of the Principles of Agriculture, this is no sufficient reason for keeping all others *without any instruction*.

The second objection is two-fold. It must be admitted that there are comparatively few fit teachers of the Principles of Agriculture, but the answer to this is that measures must be adopted to secure the needed supply. The enquiry, "Where are the men who in twenty or thirty lectures can apply all the sciences to this most complex of arts, that of farming?" is answered with equal ease, for the man who attempted it would aim at the impossible. It is not supposed to be even attempted under the regular one of the Government Department of Science. It is however supposed to be possible to give a certain amount of valuable elementary information on the Principles of Agriculture in twenty or thirty lectures, and I may add that of my own knowledge I can say it is accomplished. Indeed he must be an ignorant man, or a bad teacher who cannot do so.

To the third objection I would reply that a want of

farm experience is not limited to any one class of science teachers. It is a deficiency which is far too general, and one which is certainly not limited to the science teachers under the Government Department of Science. An enquiry is then made "Can you expect the poor fellow" (the science teacher) "to master the mysteries of superphosphates?" I do not hesitate to answer No, the more so as recent disputes show that eminent chemists differ as to the "mysteries of superphosphates," and therefore cannot have "mastered them." But the enquiry is continued, "or even distinguish between a good and a bad guano." May it not be asked in reply, is not this the work of a professional chemist, for which he gets a special fee, rather than that of a poor fellow teaching youths the Principles of Agriculture.

In brief, it is evident that Professor Church would wish to see a rich banquet prepared for his young agricultural friends, *but as this is not possible* we must all endeavour to support the noble efforts of the Government Department of Science, and supply the best course of instruction which can be secured for them. As better teachers are prepared for the duty, so we shall have a higher type of instruction given, but in the meantime let no one be discouraged in the promotion of this very necessary work. If space permitted I could give specific instances of Government Science Teachers who are doing a work of which even the Royal Agricultural College might be proud, and at a cost which is within reach of a small farmer's means. There are over 100 teachers now engaged in this work, and a large proportion are men who, having learnt farming operations in their youth, have then secured science instruction, and finally have acquired a knowledge of the Principles of Agriculture. These Teachers are doing an amount of good work which, notwithstanding any imperfections, is calculated to be of great national importance.

I am Sir, &c.,

HENRY TANNER, M.R.A.C.

(Examiner under the Department of Science in the Principles of Agriculture.)

**CABDRIVERS' CRUELTY.**—Several correspondents have asked me to notice the clumsiness and cruelty with which too many hansom cabsmen drive, and I was just meditating a short article on the subject this morning as I got into a hansom. The creature who held the reins pulled up with a jerk and a flick at his horse, after which he started with another cut and a jerk, and took his place in the rank behind a heavy van. His willing little horse would have gone had he found an opportunity, but as it was impossible to pass the lumbering machine in front of us, our pace was necessarily regulated by that. The little horse kept its nose against the van; but this did not save it from a series of slashes, and when at length an opening was found and it bounded forward to get past, its eagerness was rewarded with a couple of cruel cuts. Whereupon I interviewed the driver through the trap in the roof, and our journey ceased. This is a very constant experience of mine, and, I have no doubt, of most people who ride in cabs. If some one whose kindness of heart is equalled by his moral courage would give one of these ignorant drivers in charge for cruelty to animals, and if furthermore, the magistrate would inflict an exemplary sentence upon him, it would tend to the most beneficial results.—*Sporting and Dramatic News.*

**OBVIOUS.**—Stingy uncle (to impecunious Nephew). "Pay as you go, my boy!—Pay as you go." Nephew (suggestively). "But suppose I haven't any money to pay with, Uncle—?" Uncle. "Eh?—Well, then, don't go, you know—don't go!" Exit hastily.—*Punch.*

## TENANT FARMERS AND THEIR REPRESENTATIVES.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—Whilst the two great political parties of the country are marshalling their forces for the next Parliamentary struggle it is pleasant to find that most useful, and if united, powerful body, the tenant farmers, of our two counties, awakening to the necessity of securing to themselves a fair representation in the National Council, and by that means making a vigorous stand for their rights instead of trusting to party promises which are never intended to be fulfilled.

Permit me through your columns to earnestly appeal to my agricultural brethren in every county to aid in this just cause, to be no more blinded by a foolish partisanship with Whig or Tory, Liberal or Conservative, but to help form from amongst their own class a National party who will compel attention to the country's pressing requirements and their own, rather than permit so much time to be wasted in petty party strife and those long-drawn debate which members indulge in for the apparent purpose of finding immortality in Hansard.

Have so-called Liberal Governments, whilst in power, endeavoured to relieve the farmer from the many difficulties under which he labours? Has this present Conservative administration merited the confidence reposed in it? And will either party in the future do any real good for the agricultural interest if it can be evaded? The answer to these questions after the experience of the past must be an emphatic "No!"

Do our present representatives think we *ought* to be content with the Agricultural Holdings Act and other conciliatory measures of public utility, which, when not relegated to the limbo of a select committee, have been elaborated with all the detail which Parliamentary skill and intelligence could bring to bear on them, have been crushed by the insertion of a single clause, leaving the smiling and expectant agriculturist completely "sold," and as in the measure first mentioned, as much at the mercy of unconscientious landlords as he ever was? We are asked therefore to transfer our faith once more to the "opposite party" which holds out rewards hardly calculated to inspire much confidence in thoughtful men. The party war cries of retrenchment, disestablishment, and reform in the county franchise are freely indulged in, but no alleviation of those direct ills from which the farmer suffers such as the laws of tenure and ground game, compensation for unexhausted tillages or improvements, the unjust incidence of rates, service on juries, &c., are so much as hinted at where it can be avoided, and why? Simply because those who represent us are not practical farmers, but men who having other means and incomes are personally untouched by these evils, and whose interest in the pleasure of the soil is paramount, and blinds them to those trials that vex the tillers of it, and in justification would deny to the farmers the ease and enjoyment to which skill, capital, education, and the refinements of the age entitle them, though enjoyed by every other grade in the social scale. No, sir, the agriculturists of the present day require something very different from real neglect or tricky promises; they want a more earnest, honest, and less place-seeking set of men to represent them—men who, having fought or are still fighting for their livelihood, are best able to know and feel the requirements of their class, and who could well do so if they would but determine to unite and secure for their own body one seat in every county constituency, and instead of having one representative have fifty or more. I firmly believe that although they may not have the ability for speaking which those Q.C.'s have, who in so many cases find their way into the House, they will have more enlarged views, more true liberality and more nationalism with less selfishness and petty

class jealousy than can be found in any other body of the community.

Let every county constituency at once form a committee amongst themselves for this object and a very effective result must follow.

I am, Sir, &amp;c.,

WILL WATCH.

Winchester, March 30, 1879.

## COST OF THE MALT TAX.

Mr. Edward G. Watherston, writing to a contemporary in reference to the figures recently published by Mr. Hoyle, as to the sums expended in drink in this country, makes the following allusions to the use of sugar in brewing, and to the large sums taken out of the consumers' pockets by the existing malt tax. He says:—

Perhaps one of the most important facts developed by these figures has not been noticed by Mr. Hoyle, viz., the great increase of the use of sugar for making beer, as a substitute for malt. For example, "The Trade and Navigation Returns" for 1876, under the head of beer are as follows:—

	Cwt.	Bushels,
Beer: sugar used .....	880,333	equal to 3,870,281 of malt.
1878 " " .....	1,128,326	" 4,313,760 "
Increase of sugar used	268,003	" 1,143,486 "

—thus showing that in two years this adulteration, "which is fostered and protected by the law," has gradually increased without counting any smuggling of sugar over and above what the exciseman has noted, to the extent of what is equivalent to upwards of a million bushels of malt. It is well known that the trade of malt making for the last twenty years has been gradually drifting into the hands of a few large brewers, thereby becoming a huge monopoly, which is the logical result of the excise tax upon malt. With regard to wine and spirits being the beverage of the upper and middle classes, having "fallen off nearly two millions sterling," this is easily accounted for by the fact that the upper and middle classes (especially the latter) have been so impoverished by their losses on their trade operations that they have had to take beer in place of wine to their luncheon or dinner.

This may account for the increase in the consumption of beer this year as compared with 1877 (though it is a decrease compared with 1876)), without charging the working classes with the whole weight of the sin, as I think unjustly. Then, as regards the money spent in drink, let us take beer alone, as it is the native British beverage. There are 18 millions adults above the age of 18 years in the United Kingdom. This number, in order to consume the 1,117,316,754 gallons a year, would have to consume no more than 9½ pints per week, or less than 1½ pints per day each on the average. I am quite prepared to hear it said that this is not a fair way of putting it, inasmuch as some take none at all, and therefore others must consume more.

But I am prepared to show that out of every hundred pints consumed, 98 are consumed by moderate drinkers or sober persons in a legitimate way. Now, I have seen the estimates of a practical brewer who states that beer of the strength of Bass's bitter can be produced, in the absence of the malt tax, at 4d. per pint, and give the producer 100 per cent. profit. Let us assume that the wholesale brewer would be content (under unrestricted competition) with the 100 per cent. profit, and that the retailer had a similar profit, this would bring to the mouths of the consumers their pint of beer to their dinner or supper at a penny, in place of from 4d. to 6d., as is now the case, with the upper middle class especially. But in order to avoid exaggeration, let us take Mr. Hoyle's figures

Say 1,117,316,754 gals. at 1s. 6d. .... £33,798,756  
present cost to the country, and then deduct from it the cost under free trade, viz.:—  
Say 1,117,316,754 gals. at 8d. ... £37,943,891 ... £33,798,756  
Malt tax paid direct ..... 7,500,000  
44,743,891  
Thus showing a saving of ..... £39,054,965  
after paying the tax direct by each man according to his

means, or, in other words, according to the service rendered him by the State.

Now, why should not these 39 millions odd go to swell the demand for textile fabrics in place of going down the throat, for nothing but to swell the rent-roll of gin-palace owners? It would then clothe the naked and feed the hungry, instead of going, as it now does, to foster a monopoly already too fat by half.

## BATH AND WEST OF ENGLAND SHOW.

The *Bath Herald* says:—With the return of Spring we hear the usual notes of preparation with reference to our stated summer undertakings and amusements. Among these may be classed the Bath and West of England Agricultural Society, which holds its annual meeting this year at Exeter. No better place could be chosen for such a gathering than Devon's ancient capital. The country around is rich and beautiful, to say nothing of the archaeological lore in which the city itself is so fruitful, or of the sea which is close at hand. These are subsidiary attractions which are not unlikely to have a charm for those whose interest in agriculture is of a languid kind, but who may nevertheless feel drawn towards an agricultural festival when it is associated with these collateral advantages. Doubtless there are many such throughout the western and southern counties who will help to swell the large band of farmers and exhibitors that in the early days of June will encamp for a brief period by the placid waters of the Exe. This river flows within a short distance of the show ground, which has been admirably chosen. It is a beautiful meadow, sufficiently level, though with a slight decline towards the river, and is situate close to the Topsham-road, about one mile from the Great Western Railway station, and rather less than that from the South Western station. Access to it by rail is therefore easy, and doubtless the railway companies will see the wisdom of making it also cheap. Having paid a recent visit to the ground we were pleased to find the preparations for the forthcoming show in a forward state. The quarters for the officials were nearly ready for occupation, and the shedding for the cattle, machinery, &c., was also far advanced towards completion. The report with respect to the exhibits was also of an encouraging character. Despite the counter-attractions of the Royal International Exhibition at Kilburn and the local society at Devonport, the entries thus far are greatly in excess of what they were at the corresponding period last year, satisfactory as they then were. The Arts Department, judging by the contributions promised, is still growing in popularity, and bids fair to be one of the most successful of the series. Not less hopeful is the prospect of the Arts Manufactures department. The leading tradesmen have already made arrangements for exhibiting therein, and fears are entertained that the applications for space will be more numerous than the building can accommodate. From these reports it will be seen that the Exeter show has the promise of a great success, which is the more gratifying considering the untoward condition of trade. We may add that the view from the ground is of a charming pastoral description, the quietude of which is relieved by the traffic on the Topsham Road and the passing of the trains on the South Western line, which runs along the opposite bank of the river. During the show there will be, we understand, several garden parties in the neighbourhood, and in other forms hospitality will be extended to the society and visitors. As yet however Exeter itself has made no arrangements for welcoming the society; but we may be sure that it will be none the less hearty in its reception of that venerable and rigorous institution, which has laid agriculture under such heavy obligations throughout the west and south of England.

**EDWARDS' FARMER'S ACCOUNT BOOK.** Stamford: Jenkinson and Sons.—This is a new farmer's account book, of a simple yet sufficiently comprehensive kind. Separate portions of it are set apart for day labour, piece-work, a daily record of receipts and expenditure, tradesmen's bills, corn, roots, cake, manures, daily produce, live stock, &c., bought and sold or used on the farm. There are also places for summaries of these accounts, and for a record of correspondence.

## A REDUCTION IN RENTS.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I read with much pleasure of the liberality of the Right Hon. the Speaker and Lord Sheffield, in allowing 10 to 25 per cent. off their tenants' rents, and was pleased to notice that the Speaker was in favour of reducing the rents, if the present depression continued, in the stead of these optional reliefs.

As to the question of a general reduction in rents, there can now be no doubt the farmers are worse situated than they have been for many years. Hops, wheat, wool and Lent corn cheaper than they have been for years, and beef and mutton much lower, and local taxation higher, and School Boards expensive and vexatious. The principal argument used by the landowners seems to be that the rents only amount to 2½ or 3 per cent. on the value of the land, and consequently that is a lower rate of interest than any other investment bears. So far their argument appears good; but is it so? In many cases the land was bought in at a low price. Some land that I know was bought at £30 an acre about thirty years ago, and now pays 35s. rent, and this is not a solitary instance, but one that occurs to me while writing, and serves as an example. Perhaps the landowners will say that we must allow rent on the present value of the land; but, if we do, the 3 per cent. theory falls to the ground, as there is the increase in the value of the land to add to the rent, and allowing the present value of that land to be £45 an acre, there is a bonus of £15 an acre to add to the rent, and the owners must admit that the increased value of the land is in many cases as much contributed to by the tenants' industry and capital as it has by the rise in price of land.

I have heard landowners say it would be as well to invest in the Three per Cents. as in land, and safer; but is it so? As to the safety of it, they are equal in the present state of law as to distress. But do the Three per Cents. give any shooting, hunting, coursing? Do they grow any timber in the hedgerows? Have they any mining privileges? or do they possess a vote or rule votes, without decreasing? Beside, they are inelastic. I suppose shares to the amount of £1,000 in the Three per Cents. are worth about as much now as they were thirty or forty years ago; but I know that money invested in land so long, if bought in an ordinary business-like way, and not simply as an extension of an estate, has increased.

I read in your paper this morning and certainly agreed with the remark that "it has taken a generation to develop free trade," and we must see that every additional mile of trans-Atlantic railroad and ocean telegraph, and every ton of merchant shipping built, still further develops it. Free trade may be for the advantage of the nation at large, and I believe the cheap loaf has been a great mediator in the late struggles between capital and labour (whether it was partly the occasion I will leave); but so far as the farmer is concerned, as he is at present situated, it is ruinous.

If we are to compete with all the world, we must have our hands untied, our rents revised, our covenants altered, and free leave to grow what crops we like, and sell what we like of them. We have to compete with virgin soil under no restrictions, with stale soil and most burdensome restrictions, that treat a farmer as both fool and rogue—restrictions that would be absurd could we forget that they curtail the agricultural produce of Great Britain by millions sterling per annum.

I am, Sir, &c.,

EAST SUSSEX.

## TENURE.

TO THE EDITOR OF THE MARK LANE EXPRESS.

If there is one subject more than another on which landlords and their tenants hold divers opinions it is the vexed one of land tenure, and a happy solution of the difficulty is retarded by the variety of ideas which tenant farmers have on this self same matter. Without probing on the various forms which law or custom have prescribed let one suggest an opening for discussion, that when the happy time arrives in which farmers' grievances are actually under consideration with a real view to their abatement something like a unanimous opinion may have been formed of this primary requirement to indicate a safe investment for capital. There are those who, satisfied with the present order of things, will point to the law of contract and that of the land to provide a remedy, but the said laws are too much like a cat's back which can be stroked both ways, the landlord being from head to tail easy, smooth, and satisfactory, the tenants from tail to head, but rough work in which the operator comes off with little satisfaction and probably many scratches.

It will be sufficient for us to divide all forms of tenure into two divisions of long and short duration, leases and holdings at will, and to endeavour to show that both of these as at present constituted are not only unjust but absolutely in a national sense impolitic. Of the numerous writers who take up the cause of the tenant farmer for its own sake few rank amongst the moderately successful class who for years have depended solely on such an occupation for their livelihood, but many from those who taking up model farming as a hobby or a pastime, generally drop it after a few years trial and are loud in asserting their individual grievances only when some pet and probably impracticable idea has proved a failure. The consequence is that very little real feeling is evoked against the generally accepted terms of holding. The landlord is content because he is abundantly secure; the tenant is *not* content but sees no possible means of bringing about a change for the better and seizes on every "grievance," every straw, that floats within reach on which to rest a hope of better treatment.

A choice of terms, whether the holding should be by lease or at will, would cause anxiety to probably many men; on the one hand he would be bound by covenants which would hamper him in his judgment and restrict his energy, on the other he is free to cultivate in any way not detrimental to the property, but may have the results of his labours taken from him at any moment and see a more favoured or more fortunate successor reaping the benefit of them.

There is no business which offers such peculiarities as that of a farmer. He who follows it has to wait often a long time for the return of his money; he must be possessed of capital judgment and patience; the longer he farms his land the more he becomes acquainted with its nature and the better able to arrange its management. Here is the injustice and folly of a lease. With a constantly fluctuating market as regards supply and demand of commodities the tenant binds himself to farm only in a certain manner and under certain conditions—we will say for seven, fourteen, or twenty-one years. We will assume the latter to be the case. He may have and probably has taken the land out of or in poor condition. For the first four years he will reap but little benefit; under ordinary circumstances for the first seven years he will not make the most of his land, and again at the end of the fourteen years it will be time to consider whether he will be permitted to remain, and if not, or only allowed to do so at an advanced rate he does not feel justified in paying, he will for the remaining seven years endeavour

to draw out of the land the capital he has put into it, to its and the future tenant's detriment. In such a case it is evident that out of the whole twenty-one years but *seven* is occupied in farming to repay the cultivator, improve the soil, and benefit the community to the utmost of its capability, whilst the tenant has wasted the best part of a lifetime without making any provision for the future beyond the risky one of trying to dig up his buried capital, and in the event of his taking another lease or another farm he must commence the whole course over again at a time of life when men in every other business expect a little ease from their exertions. Under such circumstances the tenant at will system appears preferable, and it would undoubtedly be so, if compensation for unexhausted improvements, game damage, and a fair percentage for compulsory removal were insisted on.

With a generous and conscientious landlord the tenant who has held under him from youth to age may never have suffered from excessive game preservation, but been in every way liberally treated, and so with a natural feeling of security been induced to put more capital in the soil. But death or some unforeseen circumstance arise and the spendthrift heir, creditor, or speculative purchaser takes the place of the old landholder, and the tenant—greyheaded, or loth to quit the land he has tilled so many years, every part of which he has learnt to cultivate to the best advantage, which has been his home and has become endeared to him by every conceivable tie—struggles manfully against the altered circumstances, too frequently to the destruction of himself and the impoverishment of his family. Landlords, more especially small landholders, have a natural horror of anything approaching "fixity of tenure" and prefer in these greedy times taking the risks attendant on letting their holdings for large rents on short terms to any man who can give sufficient security. Such become often the prey of predatory capitalists who under the name of "land sharks" draw what little goodness remains in the soil, impoverish the land, and are a curse to the agricultural interest. Nothing is more indicative of this class than the aversion they show to settle in any one place for a lengthened period, by the use they make of powerful land stimulants, their slap-dash method of farming, and the absence of live stock. Whereas the contrary is usually the case with really good farmers who, being encouraged by having proper security for their investments so long as they continue to pay their rents, efficiently perform their contract, and do not trespass on the undoubted rights of landlords, should be safe from the danger of ejectment or an undue advantage being taken of their improvements or energy. Above all no tenure should be broken for political considerations, as in a case which recently came to my knowledge, where a farmer dying his widow was ejected—not for want of capital nor from inability to manage the farm, as she had done that for years, whilst her husband was incapable of work from illness, but because, being a woman, she had no vote. I am no advocate for women's suffrage, but our west-country landlord evidently is, as he could hardly have invented a more "telling" grievance.

In conclusion, let me urge that the subject of tenure is the very foundation of our future agricultural success, far more important than hypothec, tithes, or the abolition of the malt tax—questions affecting not so much the ultimate interests of the tenant as those of the landlord—and one which it behoves all those who hope to continue as holders of land to take into their most serious consideration.

I am, Sir, &amp;c.,

WILL WATCH.

Winchester, April 15.

**A YANKEE COURTSHIP.**—Dr. Graham, having passed a very creditable examination before the Army Medical Board, was commissioned an assistant-surgeon in the United States army in 18—, and ordered to report for duty to the commanding officer at Fort McKavett, Texas. There were no railroads in the Western country at that time, and the usual way of getting to Texas was by the Mississippi River to New Orleans, and then crossing the Gulf to stage it up through the State. Dr. Graham was very desirous of examining the Western country mineralogically, so applied for and received permission from the War Department to go by way of Arkansas and the Indian Territory to his post. On his arrival at St. Louis he shipped the greater part of his baggage by way of the river, and taking only what he could carry on horseback, started on his journey. While in St. Louis, at the Planters' Hotel, he formed the acquaintance of a gentleman who, learning where he was going, gave him a letter of introduction to his brother, who was a farmer living on his route to Arkansas. It is not necessary for us to follow him on his road, or tell what discoveries he made in the interest of science; sufficient it is that one day, towards dusk, he reached the house of the gentleman to whom he had the letter, and, knocking, knocked at the door, and presented his letter to the judge (even in those days every one was a judge in Arkansas), who would not have needed it to have accorded him an open-handed welcome; for travellers were a godsend, and news was as much sought after then as now. After a short visit, he proposed to go on to the next town, about four miles off, where he intended to put up for the night. The judge would not listen to his leaving, and was so cordial in his desire for him to stay that he would have been rude not to have done so. The judge, after directing one of the servants to attend to his horse, invited him into the dining-room, where he was introduced to the wife and daughter of his host, and also to a substantial Western supper, to which he did ample justice. After supper they adjourned to the parlour, and he entertained his new-made friends with the latest news from the outside world. The judge brewed some stiff whisky punch, which Graham, socially inclined, imbibed quite freely. The old couple retired, and left their daughter to entertain him; and whether it was punch, or what, at all events he made hot love to her, and finally asked her to be his wife and go to Texas with him, to which she consented. She being very unsophisticated and innocent, took everything he said in downright earnest, and with her it was a case of "love at first sight." But far anticipating. During the night our friend the doctor woke up and remembered what he had said, and it worried him; and he said to himself, after emptying his water pitcher, "Never mind; I'll make it all right in the morning. I must have made a fool of myself. She's lovely, but what must she not think of me!" and rolled over and went to sleep again. Morning came, and upon his going down to the parlour he found the young lady alone, for which he blessed his lucky stars, and was just about to make an apology, when she said, "I told mamma, and she said it was all right," at the same time giving him a kiss which nearly took his breath away. "Papa is going to town this morning, dear, and you ride in with him and talk it over; but he won't object, I know." "But my dear miss, I was very foolish, and—" "No, indeed; you were all right." "Well, I will go to my post, and return for you, for I must go at once." "No; I can go with you." "You won't have time." "Oh, yes, I will. Papa will fix that. It would be such an expense for you to come back all the way here." "But I have no way of taking you." "I have thought of that; that does not make any difference. Father will give us a team." With nearly tears in his eyes he went into breakfast, to which at that moment they were both summoned; but, alas! Appetite he had none. It was not that she was not pretty and nice; but he thought what a confounded fool she must be not to see that he wanted to get out of it. But it was no use. When the judge started for town, Dr. Graham was sitting beside him. The judge saved him the trouble of broaching the subject by starting it himself—"I always, young man, give Nell her own way; so it is all right; you need not say a word." "But I've got to go on to-day." The old judge turned his eyes towards him. He had an Arkansas bowie in each, and one of those double-barrel shot-gun looks as he said, "You ain't a-trying to get out of it, are you?" The doctor, taking in the situation, said promptly, all hope being gone, "No, sir." "That's

right. I will fix everything for you—give you that black team of mine, and a light waggon to carry your wife's things" (here the doctor shuddered), "and a thousand as a starter. You can be married to-night and leave early in the morning. That'll suit, won't it?" "Yes, sir," answered Graham, faintly. But on the judge turning towards him, he said, "Yes, sir, certainly." "After you get fixed at your post I will come down and pay you a visit. I have been thinking about selling out and moving to Texas for some time; it's getting crowded here, and things are a-moving as slow as 'lasses in winter-time." Things were arranged as the old judge said. The marriage took place, and the army received an addition to its ladies in the person of the Arkansas judge's daughter, and Dr. Graham has never regretted the absurdity of his father-in-law or the unsophisticatedness of his wife.—*Harper's Monthly.*

**NINE COMMANDMENTS FOR CORRESPONDENTS.**—The Boston *Transcript* gives the following nine commandments to those who write now and then to the press:—

1. Write upon one side of the leaf only. *Why?* Because it is often necessary to cut the pages into "takes" for the composers, and this cannot be done when both sides are written upon.

2. Write clearly and distinctly, being particularly careful in the matter of proper names and words from foreign languages. *Why?* Because you have no right to ask either editor or compositor to waste his time puzzling out the results of your selfish carelessness.

3. Don't write in the microscopic hand. *Why?* Because the compositor has to read it across his case at a distance of nearly two feet. Also, because the editor often wants to make additions and other changes.

4. Don't begin at the very top of the first page. *Why?* Because, if you have written a head for your article, the editor will probably want to change it, and if you have not—which is the better way—he must write one. Besides, he wants room in which to write his instructions to the printer, as to the type to be used, where and when the proof is to be sent, &c.

5. Never roll your manuscript. *Why?* Because it maddens and exasperates every one who touches it—editor, compositor, and proof reader.

6. Be brief. *Why?* Because people don't read long stories. The number of readers which any two articles have is inversely proportioned to the square of their respective lengths. That is, a half-column article is read by four times as many people as one of double that length.

7. Have the fear of the waste basket constantly and steadily before your eyes. *Why?* Because it will save you a vast amount of useless labour, to say nothing of paper and postage.

8. Always write your full name and address plainly at the end of your letter. *Why?* Because it will often happen that the editor will want to communicate with you, and because he wants to know the writer's name as a guarantee of good faith. If you use a pseudonym or initials write your own name and address below it. It will never be divulged.

9. "These precepts in thy memory keep," and for fear you might forget them, cut them out and put them where you can readily run through them when tempted to spill innocent ink.

**A BIRTH IN A BALLOON.**—Births and deaths sometimes occur in strange situations. The *Rappel* relates a story which in a less serious paper would pass for an invention. In the captive balloon recently a young lady was taken ill. A doctor from Tarbes, who happened to be in the car, saw her safely delivered of a boy before the balloon reached the ground, when a cab took the mother and child to a hotel. The husband, son of one of the leading Manchester manufacturers, presented the doctor with 500*l.* for his services; and the *Rappel* commends balloon ascents to doctors in want of patients, while it remarks that a child who has started so high in the world promises to attain eminence.

Old Lady (who had been buying eggs). "Deed, Mr. Mc Treacle, butcher's meat's as dear now-a-days ah'm no able to buy t'! Grocer. "You should turn a vegetarian—" Old Lady. "A vegetarian!—Na na! as was born an' brocht up i' the Free Kirk, an' a'm no gaun ta change ma religion m' auld days!"—*Punch.*



## THE AGRICULTURAL HOLDINGS ACT.

The members of the Government should be the best judges of the course which it is expedient for them to take upon any question with a view to party ascendancy; but the game which they are playing so boldly and with so little disguise just now is one of no slight risk, and we venture to predict that they will find to their cost, when it is too late to retrieve their mistakes, that they have played it wildly and not well. In deciding what course they should take with respect to the County Boards Bill they had to choose between the conflicting claims of the country magistrates on the one hand, and the farmers and other county rate-payers on the other. Last year they did their best to please both, and succeeded in pleasing neither. This year they have completely thrown over the bulk of their county supporters for the sake of giving complete satisfaction to the county magistrates, and the result is a Bill which will excite a strenuous opposition, and which will render them more unpopular if they pass it than if they are compelled to give it up. This is wild move number one, and the second is like unto it, "only more so." We refer to the refusal to grant a Committee of Inquiry into the Operation of the Agricultural Holdings Act, and the conditions of agricultural tenancies in England and Wales, moved for by Mr. Samuelson on March 25th, and supported by prominent members on either side of the House. Such a snub to the tenant-farmers of England, administered as it has been immediately after the throwing of a sop to the farmers of Scotland from motives of the most transparent tactical expediency, by supporting the second reading of the long-resisted Hypothec Abolition Bill, is a piece of effrontery almost sublime in its boldness. It tells English tenants, as plainly as the most explicit language could tell them, not only that the Conservatives have no fear of losing their votes, as long as their landlords and political masters are kept well pleased, but also that the Scotchmen can exact concessions by political belligerency such as are persistently denied to English farmers who rest their claims upon faithful service and long tried friendship. The failure of the Agricultural Holdings Act was a disgrace which the Government responsible for it should have been anxious to wipe out on the first opportunity, and this for the sake of their prestige, if from no higher motive. The Act was passed with the ostensible object of remedying what was admitted by those who framed and carried it to be an injustice to tenant-farmers, resulting in a great and constant loss to the nation at large. As was pointed out at the time, the measure was defective and unsatisfactory in its details, and it was further rendered ineffective by the insertion of a clause which made its complete evasion a simple matter of a few strokes of the pen. The result has been what those whose exertions led to the introduction of the measure predicted—it has been from the day of its birth until the present time little better than a dead-letter Act. Even as a "homily to

landlords" it has fallen on deaf ears, with only a few exceptions to mark the rule by contrast. Three returns collected since the Act came into force—the first by the *Mark Lane Express*, the second by the Farmers' Club, and the third by Mr. Samuelson—each obtained from more than two hundred correspondents connected with farming either as owners, agents, or occupiers, all show that neither directly nor indirectly has the Act produced any appreciable effect. Lord Sandon, in opposing Mr. Samuelson's motion, said that the Farmers' Club returns "showed that tenant-farmers throughout the country were, as to unexhausted improvements, as to notices, and as to agreements, in a much better position than before it (the Act) passed;" but those who have seen these returns themselves, instead of merely the abstract and commentary upon them made by the Secretary of the Club, know that they show nothing of the kind. It is true that tenants stand just now in a more favourable position for making their own terms in agreements than they have occupied at any time during the last thirty years or more; but this is owing principally to the agricultural depression which threatens to throw thousands of acres of land out of cultivation, and only to a very small extent to the passing of the Agricultural Holdings Act. In short, the Act is just about such a failure as the latest Land Transfer Act, and it is quite unnecessary to say more in its condemnation than that. It is impossible that the country gentlemen who made a hollow pretence of defending the Act on Tuesday should fail to be aware that such is the case, and the members of the Government are country gentlemen also, and know only too well that the Act passed with such a great flourish of trumpets has proved to be a ludicrous sham. Yet, instead of frankly admitting what is perfectly clear to lookers-on as well as to themselves, they prefer to imitate the tactics of the ostrich, thus blinding their eyes to the general feeling of disappointment which they have caused. Mr. Samuelson gave them an excellent opportunity of getting out of their difficulty, by the appointment of a Committee whose investigations would have relieved them of a responsibility which now rests entirely upon their shoulders. If there is any truth in their apologies for the Act, it is clear that the result of the reports of a well-chosen Committee would be to give them honour for having passed a measure which, they declare, is so eminently satisfactory. By refusing to grant the Committee, they have given their opponents fair grounds for declaring that they have placed themselves in this dilemma—either they have no confidence that their good opinion of the Act is shared by the landowners, agents, and tenants who would be called as witnesses; or they virtually admit that their excuses for the Act are consciously sophistical. Regarded in the most favourable light, their refusal cannot fail to be considered a snub to the farmers. At the last meeting of the Central Farmers' Club a resolution in favour of

appointing a Committee was carried by a large majority, there being only five or six dissentients. Mr. Samuelson's returns, which appeared in the supplement to the *Mark Lane Express* for the 25th March, show clearly that farmers generally regard the Act as a sham, and many of them declare this opinion in no measured terms. Are not the Government presuming a little too far upon the long-tried patience of their old supporters? We think they are, and we need only point to the formation of a Tenant Farmers' Political Association in Warwickshire, and to the probability of a National Association being organised ready for the coming general election, to justify our opinion. Still, if the Conservatives are satisfied with the position they have taken, disinterested outsiders have no cause to grumble about it. The alliance of that party with the agricultural tenants of this country has been one in which the advantage has been all on one side, and if it is severed the farmers and the people generally, who depend to a greater extent for their comfort upon agricultural prosperity than is commonly acknowledged by this "nation of shop-keepers," cannot well be losers, and may gain something by the severance.

### THE DISCUSSION.

MR. B. SAMUELSON rose to move for a Select Committee to inquire into the operation of the Agricultural Holdings Act, 1875, and into the conditions of agricultural tenancies in England and Wales. Having given a summary of the provisions of the Act, he stated it was a curious fact that it had no preamble; but the reasons why it was passed could be gathered from the speech of the Earl of Beaconsfield when, as Mr. Disraeli, he moved the second reading in that House. He said it was devised to supply the deficiencies in the law relating to agricultural tenancies; he referred, with approbation, to the efforts of Mr. Pusey and others to give compensation to tenants for unexhausted improvements effected by them, and to prevent the deterioration of the soil; and he described the measure as one that would place owners in a strong position and occupiers in a just position—one that would secure to the tenant compensation for unexhausted improvements, and to the owner compensation for waste and injury through breach of covenant. Notwithstanding the declarations of the Prime Minister as to the benefits the Act was calculated to secure to the tenant, it appeared from inquiries instituted by very competent persons that it had proved to be to all intents and purposes a dead letter. (Hear, hear, and cries of "No.") He was perfectly aware that such a statement would not pass unchallenged, but when it was made on respectable authority a case was surely made out for the inquiry he proposed. The weak point of the Act lay in two formal clauses at the end which enabled landlords and tenants to remain outside its provisions. This was done in ordinary cases by mutual agreement, and in the case of yearly tenancies by the act of either party without the concurrence of the other. The Prime Minister called this "freedom of contract," but it was certainly a question whether the phrase properly described an arrangement by which one party gave up that to which he had previously been declared to be entitled without receiving from the other party anything in return. (Hear, hear.) Why the Act had been so strangely constructed he could not imagine, unless the Prime Minister had counted upon educating his party sufficiently during the passage of the Bill to enable him to conveniently drop the last two clauses altogether. No sooner had the Act passed than a remarkable circumstance occurred. Both the Duchy of Lancaster and the Duchy of Cornwall, which had been specially included in the Bill, contracted themselves out of it, without a word of explanation being offered. Probably there were excellent reasons for this step being taken, but hon. members would agree with him that the fact was not calculated to inspire confidence throughout the country generally in the working of the Act. Returns collected by the *Mark*

*Lane Express*, and also by the Farmers' Club, soon after the Act came into operation, showed that at the time it was almost universally evaded. He had caused inquiry to be made in every county in England and Wales from persons well informed on the subject as to the operation of the Act, and had received in all over 200 replies from 51 counties. In the great majority of instances the reply amounted to this,—that the Act was a dead letter, or had not been adopted at all; in some cases the existing customs rendered the adoption of the Act unnecessary, while in one or two instances the reply was that the existence of the Act had caused 13 months' notice to be given instead of six. One agent on an extensive estate said, "Nearly every land agent in the kingdom has noticed the tenants out of the Act." One other question he had put was whether the passing of the Act had led to any improvement in the conditions on which farms were let. There, again, the effect of the vast majority of the replies received was that it had not, while in a few cases the reply was that it had led to the giving of longer notice and to more liberal dealing with the tenants—that it had opened the eyes of the tenants and had led to their making better terms; and in one case it was said that the Act had led to a revision of agreements and an increase in their stringency. He had now made known to the House the replies which he had received, and it was for the House to judge whether the statement he had made to the effect that the Act had resulted in very little improvement was correct or not. In some cases where agreements existed before the passing of the Act, the agreements had been altered so as to be more in conformity with the principles laid down in the statute; but, on the other hand, no agreements had been granted in consequence of the Act in those cases in which none existed before the introduction of the measure. In answer to inquiries that he had made, he had found that the system of paying for unexhausted improvements was followed in very few quarters. The words of the hon. member for South Norfolk (Mr. C. S. Read) in reference to this point were well worthy of attention. The words to which he referred were:—"Is it or is it not true, that the half or more than the half of the land of England is held at six months' notice to quit, without any compensation to the outgoing tenant, either by agreement or custom?" The hon. member for South Norfolk appended a note to those words to the following effect:—"The question has become a national one, and it is a disgrace that a great portion of the land of England should be held by tenants on the conditions on which it is held now." In refutation of the argument that a low rent was an equivalent to compensation for unexhausted improvements, he quoted from an essay on "The Relations of Landlord and Tenant" by Mr. W. E. Bear, whose name would be recognised as that of the writer of two recent papers in the *Fortnightly Review*. There were numerous estates in the country, he knew, where the tenants had such faith in the continuance of their possession that a sufficient encouragement existed for them to lay out money on improvements, but that faith surely could not be thought to be the equivalent of a law which would grant to tenants such compensation as was just. According to the statistics lately published by Mr. Caird in his little book on the landed interest, the value of home-grown food was about £280,000,000 per annum. It appeared that during the last eight years there had been no increase whatever in the production of grain, and only a very trifling increase in the production of animal food, in this country. But within the last five or six years there had been a sensible diminution in the production both of grain and animal food. Our imports of food of various kinds during the year 1878 amounted to £100,000,000. Comparing 1878 with 1868, there was an increase of nearly 100 per cent. in grain and of 135 per cent. in animal food and various products. He had shown that in the opinion of the Prime Minister it was desirable that our home produce should be increased, if possible. The estimates varied greatly—from 10 to 100 per cent.—but they all agreed that it was possible, by causing capital to be invested in the soil, to increase our supply of food. Additional capital would not, however, be invested in the soil until tenants were enabled to obtain compensation for their improvements. Therefore we must consider this as a question affecting not only landlords and tenants, but also the consumers and the country at large (Hear, hear). Agriculture was at present suffering from great depression. He had had the curiosity to examine the return of the number of bills of sales lately granted by farmers. In the eight months from

July, 1876, to the beginning of March, 1879, as compared with the corresponding eight months of 1877-78, the number of bills of sale had nearly doubled. This fact was in itself sufficient to show that great distress prevailed among agriculturists. He hoped, if the House were to grant a Select Committee, that the inquiry would have definite limits; if it were to go into the questions suggested by the amendment of the hon. member (Mr. Chaplin), it would be a waste of time to all concerned. The course taken with regard to the amendment was rather suspicious. His notice had been on the paper for three months, and the hon. gentleman took no steps to bring the question to an issue. But when the amendment was put down, the cry for reciprocity, which was another name for protection, was rife in the country, and if he was not mistaken, the amendment pointed in the direction of reciprocity. But he was quite certain the country would never allow import duties to be placed on the food of the people (Hear, hear). Import duties were neither more nor less than protection to the landlord's rents (Hear, hear). He held in his hand an account of a sale of 25,000 bushels of wheat imported from Chicago into Liverpool. The freight and charges, including the cost of sale in Liverpool, were 12s. per qr., in addition to the expense of conveying the wheat, perhaps from the frontier of Illinois to Chicago, and from Chicago to New-York. In point of fact, the landlord had a protection already of from 14s. to 15s. per quarter, which was about equal to 35 per cent. of the present price in this country (Hear, hear). If that were not a sufficient protection, one of two things alone could happen. Either the land must be made more productive, which could only be done by an expenditure of capital, and that could be obtained only by giving the tenant security, or rents must fall. He hoped that, by adopting equitable measures towards the tenant, we might avoid any great reduction of rents. But if rents fell, then would be the time for the inquiry of the hon. member for Mid-Lincolnshire and also for inquiry into a state of things which was bound-up in the system of primogeniture and entail (Hear). Farmers were no longer so ready as they used to be to take leases, and in the present state of things, when they did not know what a just rent was, it was not desirable that they should. If that were so, there was the greater reason for security for agricultural improvements. He would like that the committee he asked for should, in the first place, ascertain on independent testimony whether the Act of 1875 had failed; secondly, what were the objections of landlords and tenants to it; and, thirdly, that they should determine the best way of meeting those objections, whether by amending the Act or repealing it and enacting something more simple. He asked that if a man had to part with what the law declared to be his property he should receive a valuable consideration in return. If the Act of 1875 were maintained, the scheme of compensation should be made more elastic; the award of an arbitrator should be simpler than it now was, and appeals should be much more restricted than they were under the Act. With regard to the amendment to be moved by the hon. member for Bangor, he could have very little knowledge of the circumstances under which farms were held in this country if he was not aware that if his proposal, which looked like fixity of tenure, were adopted, no labourer could ever become a landowner without a middle-man between him and the landlord. The hon. member for Oxfordshire had also given notice of an amendment that agricultural agreements prescribed by the Legislature should be permissive in their character. He entirely agreed with him, but he could not consider that a permissive agreement where one party was at liberty to contract himself but of it without the consent of the other party. He had only, in conclusion, to state that the London Farmers' Club, which was in every sense a representative body, had at their last meeting passed a resolution in favour of his motion for granting a committee. Thanking the House for the attention they had paid to him, he begged to move for a Select Committee (Hear, hear).

Mr. PHIPPS seconded the motion. Referring to the distress which existed among farmers, he stated that many who had been long engaged in agriculture and were unfit for any other calling were leaving it in order to save the remnant of property still left to them, and unless the depression were in some way quickly removed many others would follow their example. Some of the causes of that depression were practically irremovable. First of all, there was the importation of foreign agricultural produce. Though large, that importation

was at present in its infancy, the great efforts of foreign countries being directed to provide food for the English market. The British farmers expressed no desire that these importations should be restricted by law, for they knew that no Government could or ought to place any obstacles in the way of the consumers obtaining cheap food. The increase in the price of labour must, of course, depend on supply and demand. The decrease of the home-consuming power would not be alleviated until prosperity was again brought to the commerce and trade of the country. Unpropitious seasons were beyond the control of the British House of Commons. But there were three causes which were preventable by legislation—the importation of disease, the increase of local burdens, and the insecurity of capital invested by the tenant in the cultivation of the soil. It was to remedy the last of these evils that the Agricultural Holdings Bill was introduced. The question was, had it effected its object? If not, why not? The committee now asked, if granted, would be able to give an authoritative reply to these questions. The right of the outgoing tenant to compensation for unexhausted improvements left on the land for the benefit of the future occupier, although a most beneficial provision, was rendered ineffectual by the power of one of the parties to contract himself out of it. Were the provisions of the Act necessary? If unnecessary, why were they enacted? Were they just, and, if just, why should they be ignored? To his mind they were alike advantageous to the landlord and the tenant. The tenant could not contract himself out of the return of the Property-tax, which he had a right to deduct by Act of Parliament, notwithstanding any agreement to the contrary. So by Act of Parliament should the right of tenants be recognised to payments for unexhausted improvements, notwithstanding any agreement to the contrary. This should be secured, not for the benefit of the tenants alone, but in the interests of the community at large. He knew this view of the question would not be acceptable to those who considered the maintenance of freedom of contract incompatible with the restrictions imposed by law; but might not freedom of contract be carried too far? Was not freedom of contract limited in many ways by Acts of Parliament? Landlord and tenant ought to be able to make any agreement they pleased, provided that agreement did not deprive the tenant of the compensation to which he was justly entitled. But an Act of Parliament was unnecessary, if not unjust, which, while exacting that certain things should be done in the interest of all, still retained a provision that any two parties might by agreement divest themselves of the obligations which the Act imposed. The general consensus of opinion expressed by the farmers' clubs was in favour of changes in the law which would secure compensation to the tenant for unexhausted improvements, as well as to the landlord for dilapidation and deterioration caused by neglect; and he therefore seconded the resolution.

Mr. O'DONNELL rose to move an amendment that—  
"There can be no adequate remedy for the agricultural depression existing throughout the country, and severely affecting also the interests of town labour, which does not, especially at this period of increasing foreign competition, protect the application of skill and capital to the soil by the establishment of compensation for unexhausted improvements, equitable appeal against exorbitant rents, and substantial security of tenure for the agricultural classes both in Great Britain and Ireland."

He said that he advocated free-trade in farming as well as in commerce. He appreciated the speech of the hon. member for Banbury, but he did not see that speech in the resolution. The speech was rather an argument in support of his amendment. The resolution showed the unreal character of the make-believe sympathy with the agricultural classes that was embodied in the Agricultural Holdings Act. It did not introduce any reform into the agricultural relations of this country, and he very much doubted whether it was seriously intended to do so. He trusted that the Liberal party would place the motto of "Free agriculture" on their banner beside and as a supplement to the motto of "Free trade."

Major O'BEIRNE, on seconding the amendment, observed that the land question was that which excited the interest of the Irish people more than any other which had been or could be raised.

Colonel RUGGLES BRICE said that the amendment, as he read it, advocated a system of fixity of rents. Mr. O'DONNELL expressed dissent. He hoped the day was [at]

distant when an English member would be found to support such a proposition. He did not think the time had come for a select committee to inquire into the operation of the Agricultural Holdings Act, for a committee could not recommend anything at the present moment that would alleviate the existing distress. A temporary remedy would be a considerable reduction in rents, but he believed that there had not been of late years as large an increase in rents as many people supposed. (Hear, hear.) Another remedy might be found in the removal of some of the existing restrictions from agriculture. The abolition of the law of settlement and entail would not influence one way or the other the prosperity of agriculture. No doubt the Game Laws exercised at one time a disastrous effect upon the agriculture of the country; but they did so no longer, as the discussions that had taken place in the House in former years, when the advisability of abolishing those laws was under consideration, had produced much the same effect as would have resulted from their actual abolition. The House had been told that the abolition of the privileges of the landlords would be of assistance to agriculturalists; but what, he asked, were those privileges? He did not believe that the remedy which was sought would be found to lie in greater production. Many of those suffering distress at the present time were among the largest producers and best farmers in the country. The Agricultural Holdings Act was, in his opinion, one of the best measures affecting agricultural interests that had been introduced into Parliament for many years. As far as the county which he represented was concerned the statistics quoted by the hon. member opposite (Mr. B. Samuelson) were misleading. He knew hundreds of farms that were farmed under the Agricultural Holdings Act, and their number was increasing every day. The Agricultural Holdings Act had established a local custom where no previous custom existed, and this was an advantage. His opinion was that the Act could be made to do more than it had done, and therefore he was in favour of the appointment of the committee which was asked for.

Mr. J. BARCLAY remarked that when the Agricultural Holdings Act was brought forward he suggested that it should be compulsory. If that had been done he believed a stimulus would have been given to the agriculture of this country. Farmers would have put a larger amount of capital into the cultivation of the soil, and, consequently, would have been in a better position to meet the adverse seasons and the low prices which had now come upon them. The state of matters as regards agriculture had, however, become so grave that he doubted whether, even if the provisions of the Act were now made compulsory, they would suffice to rescue agriculture from the collapse which was now threatening it. He did not think it desirable that a committee should recommend anything in the way of raising the price of agricultural produce; but he was of opinion that it might inquire whether the position of the farmers might not be so changed as to enable them better to meet the present low prices. The hon. gentleman complained of the indifference of the Privy Council Department to the present state of things—when dead meat as well as live cattle could be imported from America, the importers having the advantage of buying the stock at a cheap rate in the Western States, while the farmers at home had no such advantage in buying their store cattle. This was more a landlord's question than a tenant's, in proportion as the interest of the landlord in the soil was greater than that of the tenant. What did wheat imported into this country at 25s. or 40s. per quarter mean to the landlord? It could not be produced here at less than 48s. per quarter, and between a third and a fourth of that sum, or from 12s. to 16s., was due to the rent of the land. But if wheat could be imported at 40s. that meant a loss of 8s. per quarter on the wheat produced in this country. That loss could not continue to be borne by the farmer. Who, then, was to suffer the loss? The reduction of labourers' wages was hardly possible. The next important item in the tenant's outlay was his manure bill. The value of manures was likely to increase, and it would be wise to increase his outlay on that head. On whom, then, was the loss of 8s. per quarter to fall? It must come out of the rent. Farmers were told they should live more economically. It was impossible for farmers to live more economically than the Scotch farmers did. But, if it were possible, should the amount saved be paid over to the landlord in the shape of increased rent? The farmers of Scotland had shown great energy and enterprise in improving the land as

they had done; but a 19 years' lease was not sufficient to recoup a tenant for the capital he had expended in the improvement of the soil. Mr. Hope, of Fenton Barns, one of the most successful farmers in Scotland, had told him that during the 19 years of his lease he had derived no benefit from his outlay, and it was only by getting another 19 years' lease that he was enabled to make anything out of it. In Scotland, when a lease was approaching its termination, it was the practice to renew it at a valuation, but the valuer was appointed by the landlord, and without knowing the state of the farm when the lease was obtained he valued it with the improvements effected by the tenant's capital, and made an increase which, of course, was added to the rent. He should like a committee to inquire into the effect of legislation on tenant farmers, the effect of the law of distress in giving preference to landlords' over tenants' capital, and what effect the conditions imposed by land agents and others had upon the development of our resources. These conditions in many cases had been drawn up 50 years ago, and were printed and stereotyped; it was perfunctorily laid down that they must govern any offer to be entertained; and it was not at all surprising, under such circumstances, that agriculture was in a depressed state. Another subject worthy of attention was the possibility of bringing a large supply of store cattle from the Western States of America by a route perfectly free from pleuro-pneumonia. He repudiated any thought of agriculture being protected either directly or indirectly. Whatever reciprocity might do for manufactures, it would be adverse to the cultivators of the land. There was urgent need for inquiry into the causes of the present depression in agriculture, not so much the external causes as those which affected the action of tenant farmers in regard to the cultivation of land. He doubted whether inquiry or change would come in time to prevent large numbers of present holders being ruined, but he hoped that information would be obtained which would go far to educate public opinion and to bring in a new class of cultivators who would start upon a fair and solid basis.

Sir J. KENNAWAY admitted that if, as some hon. members maintained, half the land of England was farmed under the conditions of six months' notice, with no provision at all for the compensation of the outgoing tenant, the state of things would be well worth the attention of that House. But he was very much inclined to doubt whether the Agricultural Holdings Act had proved to be the dead letter which the hon. member for Banbury said it was.

Mr. M'LAGAN supported the motion, believing that a sufficient case for inquiry had been made out. He could not agree with those who held that the farmer had not good times in store for him. The present condition of depression would, he had no doubt, pass away, and the agriculturists would be favoured with as bright days as they had ever heretofore enjoyed. They ought not, however, to run away with the idea that the days of protection, or, as it was called, of "reciprocity," would return. He did not hesitate to say that they would never see a protective duty imposed upon any article consumed by the people. (Hear, hear.) Thinking that the time had come for an inquiry into the operation of the Act, which clearly did not come up to the expectations that had been formed by many of those who were in favour of it, he intended to give his support to the resolution of his hon. friend (Mr. B. Samuelson).

Mr. REAT, referring to a statement made on a former occasion to the effect that a speech which he had delivered in connection with the subject under the consideration of the House was one which should have been uttered after a "two-shilling ordinary" (laughter), said that, as a matter of fact, it was uttered after imbibing an eighteen-penny market tea, and consequently might easily be of a weak character. (Laughter.) The House was much indebted to his hon. friend the member for Banbury, who had brought forward the subject of the Agricultural Holdings Act, as it was not likely that another opportunity of considering it would have presented itself this Session. He held that the Act was a very good one, and said so because it was a copy of a Bill which he had himself introduced into the House. (Laughter.) It was a good Act, but it was not free from imperfection. In it there was an excellent homily to landlords, but he was sorry to say that a vast majority of those to whom the homily was addressed had excused themselves from attending to the duties which it enjoined. The Act came into operation where it was not wanted, and where it was wanted its provisions were

not, unfortunately, of much avail. The good landlords, for whom the Act was not required, had accepted it, but the needy or grasping ones had as a rule rejected it. (Hear, hear.) In the ranks of those who had contracted themselves out of the Act was the Duchy of Lancaster—a fact which must, in his opinion, naturally give rise to wonder. Recently, without doubt, the Act had been more generally adopted (hear, hear), as tenants had become independent in consequence of bad times, and had therefore been able to get a greater amount of justice done than formerly. For his own part, if there was to be a general inquiry into the condition of agriculture and the cause of the existing depression, he should like to see that inquiry entrusted to a Royal Commission instead of to a committee of the House of Commons, as the report of a Royal Commission would be accorded more confidence than would be placed in that of a committee. The depression in agriculture had been produced by a large number of circumstances, and he wished he could see a chance of a recovery. There were burdens which it was impossible for legislative enactments to relieve. He thought he was right in saying that the chief cause of the distress had been our unfruitful seasons—particularly those of the last four years. Another cause was the absence of restriction on imports. We had had 31 years' experience of free trade, and the predictions of the Protectionists had been proved to be true. In 1851 and 1852 we were given a dose of free trade and then followed the discovery of gold in different parts of the world, then the Crimean war, the cotton famine, and the Franco-German war—all of them circumstances tending to raise the prices of the commodities produced by farmers. Only three times in his life had he heard of the price of wheat being as low as it was now. The first occasion was in 1836, when there was a heavy protective duty. In 1832, 1833, 1834, and 1835 the harvests were good, and now, after four exceedingly bad harvests, the price of wheat was just the same as it was then. In 1861 the price of wheat was again as low as it is now. That was in the first days of free trade. It had been said that rents had come down. He did not believe, however, that where there was a fair proportion of grass and good tillage land rents had been considerably reduced, nor did he think they would fall very much, although, no doubt, the very light land and the very heavy land would go out of cultivation. (Hear, hear.) Farmers had a right to complain of the tithes which were 12 per cent. above the amount at which they had been commuted. "His arose from the unfair way in which the averages were last struck. Again, the increase of rates was most burdensome, and where a School Board had been established in a small agricultural parish the pressure became really grievous. He knew School Board rates which were 1s. or 1s. 6d. in the pound, and this meant a property tax on the farmer of 2s. or 3s. in the pound. What would any tradesman think if such an impost were inflicted upon him? (Hear, hear.) Moreover, the farmers had still to complain of the operation of the Malt-tax. As for the agricultural labourer, he had never been so well off as he was at the present day, when he could buy a bushel of wheat for two days' pay. He rejoiced in the improved condition of the agricultural labourer. (Hear, hear.) It had been urged that the property of the landlords had greatly improved since the introduction of free trade. He did not see, however, that there was very much in that, as comparatives between increased values ought to be comparative, and not absolute. Mr. Caird told them in his recent work that land had increased 21 per cent. in value between 1857 and 1875. How was that arrived at? In the first place there had been a great increase in the general assessment; next, the enlargement of towns, the increased value of residential estates, and the construction of railways had considerably raised the value of land. Again, the landlords had embarked an immense quantity of capital in the land in the shape of permanent improvements, and large contributions to the value of estates had also been made by the tenantry. The returns of Property-tax in England from 1847 to 1877 showed that land had increased in value 26 per cent.; but in the same period houses had increased in value 40 per cent., while the profits of trades, professions, and public companies had increased 231 per cent. Taking from 1857 to 1877 land had increased in value exactly the same, or 26 per cent., which showed that in the early days of free trade land was stationary in value—houses had increased in value 170 and trades 155 per cent. In another period, from 1865 to 1875, according to figures given by Mr. Giffen, who, he believed, was not gene-

rally regarded as particularly favourable to the landed interest, land had increased in value only 8 per cent., houses 38, railways 58, public funds 146, mines 190, and iron works 314 per cent. (Hear, hear.) Therefore, as compared with other property the increase in the value of land was very small. He would support the motion. (Hear.)

Mr. CHAPLIN, who had given notice of an amendment to the effect that the inquiry should be into the "present depressed condition of agriculture, and how far it is owing to causes which can be remedied by legislation," disclaimed any idea of raising the question of protection. He agreed with all that had fallen from hon. members as to the depression in agricultural circles. It was more than depression. He was not sure that hon. members would be far wrong if they described it as the decline of agriculture in England, and if that decline were prolonged and permanent it would be a calamity not only to the agricultural interest, but to all classes of the community. (Hear, hear.) The hon. member attributed our diminished production to the want of security for his capital on the part of the tenant, and to the Act of 1875 being permissive and therefore non-effective. This diminished production, however, was entirely independent of that or any other Act; its causes were many and various. The hon. member had called the Act a dead letter. On the contrary, the Act of 1875 had made cardinal changes in the relations between the landlords and tenants of England. Before the passing of the Act all improvements, whether exhausted or otherwise arising out of the capital and labour of the tenant, became the property of the landlord. After the passing of the Act the whole presumption of the law was reversed. (Hear, hear.) The hon. member said it was impossible for agriculture to flourish until they provided for the tenant greater security than he now enjoyed. He told them that the Crown lands had all been contracted out of the Act—that the author of the Act had contracted himself out of it. Now, he was in a position to state that all the farms of the noble duke referred to were under lease; and that of the 37,000 acres of the Duchy of Lancaster 3,700 acres in the county of Norfolk were let under lease. He stated that the Act had been adopted in very few instances. What did all this mean? The contracting parties had preferred, and very properly, to enter into agreements of their own. The first of the causes which had led to the present depression in agriculture was the succession of three or four very bad seasons, resulting in greatly diminished produce, which had suffered not only in quantity but in quality. Another cause was the very bad prices received for that produce. These were the real causes of distress in agriculture—the consequences had been little return or loss on the capital invested. It was no wonder that agriculturists should be more or less disheartened. Agriculture in England was not fairly treated. Land was far more heavily taxed than any other property in the country. Why should real property alone contribute to many important national objects? While they were imposing heavy additional taxes on land they were also largely increasing the expenses of the farmer in the labour he employed (Hear, hear.) They compelled him to pay men's wages for a great quantity of work which had hitherto been often better done by boys at one-third of the price paid for men. The labour question itself was by no means one of the least of the farmers' difficulties. But more than all this, there was the great competition he had to meet in the increasing importation of food from abroad. The trade in meat had sprung up in America and developed with a rapidity which was unprecedented. If the American trade was really capable of all that was claimed for it, the conclusion must become almost irresistible, that so far as arable land was concerned, the days of the farmers were nearly numbered. What was the case in dairy farms? He was told that the price hitherto obtained for their cheese had been diminished of late by nearly one-half, owing to the competition they had to meet with from America. Nowhere, he understood, was distress greater than in farms of that description at the present moment. A statement of the expenditure and returns of a farm, the details of which he would show any hon. member, exhibited a loss of 2s. if the holding were not free; and that brought out the important fact that rent was an insignificant proportion of the outgoings on ordinary average arable farms (Hear, hear.) On a farm of 500 acres the outgoings amounted to £3,377, and the rent, at 30s. an acre, to £750, or one-fourth of the whole. A return of 20 or 25 per cent. of the rent was a mere bagatelle to the tenant, and it might be ruin to the landlord. It would not

enable the tenant to cultivate the land if he could not do it now. If things remained in their present position, it would be difficult to cultivate a great part of England at all. No doubt the difficulties of the farmers were largely owing to the bad seasons we had gone through, and the general depression in trade had reacted on agriculture in England; but, before considering remedies, it was necessary to ascertain whether our present depression was of a temporary or of a permanent character. If it proved to be permanent, the serious position and prospects of agriculture would render it incumbent on us to look the matter fully in the face with a view to devising an adequate remedy.

Sir T. ACLAND said that no substantial question had been raised except by the speech and motion of the hon. member for Banbury. If the Act had not proved the boon to agriculture it was expected to be, what was the reason for its failure? Was it the fact that the landlords and the land agents as a body were opposed to the Act and would not allow the farmers to take advantage of it? These were questions which it was very desirable to get answered. No doubt the Act had done good by changing the presumption of the law, and by enabling limited owners to do more than they could do before. But there was, he believed, a general distrust of it throughout the country. It was essentially a conveyancer's Act and smelt of the Court of Chancery from beginning to end. It was, moreover, very complicated, and he could sympathise with those who asked why justice could not be done to the farmer in a simple and direct fashion. There was one thing that the Legislature ought to take into their serious consideration, and that was the protection which the farmers undoubtedly required on the question of game. He also argued that protection should be granted tenants against the effect of an unforeseen sale of his land to a stranger—the contract with the tenant should not be disturbed by the purchaser without the tenant's consent for a reasonable period; two years at the very least. He trusted that the Government would not consider the present motion in the light of one of censure. It was not. On the contrary, it was to carry out its legitimate conclusion a most useful work which they were the first to initiate. (Hear, hear).

Mr. NEWDEGATE observed that he had always endeavoured to advance the interests of the agriculturists. So far from opposing the action taken by Mr. Pusey, he had moved for and obtained the appointment of the Agricultural Customs Committee, and had resigned the chair in favour of Mr. Pusey, though he did not go the entire way with him in his views. He could not but think, however, that the present Act had not been sufficiently tried. It had been but three years in operation, and the time had not yet come to inquire into the result of its working, which he believed to be on the whole beneficial to both landlord and tenant. The fact that agriculture was suffering from the depression of trade had been alluded to in the course of the debate, and the hon. member for Banbury had mentioned that £100,000,000 worth of food had been imported into this country. He asked the indulgence of the House while he quoted some statistics to show that the circumstances of the depression had not been exaggerated. From 1871 to 1874 inclusive the value of our imports was £1,437,000,000, and from 1875 to 1878 inclusive the value of our imports was £1,511,000,000. The value of the exports of British produce from 1871 to 1874 amounted to £974,000,000, and from 1875 to 1878 to £817,000,000, there being thus a diminution of £157,000,000. It would be found if all the figures were studied that the excess of the value of the imports over the value of the exports in the period from 1875 to 1878 was more than double the excess of the value of the imports over that of the exports in the period from 1871 to 1874. With such a state of trade as statistics disclosed how could we expect the country to be prosperous? His opinion was that the country had a right to demand that the House of Commons should inquire into this condition of things. (Hear, hear). The proposal of the hon. member for Banbury fell short of the inquiry which was really required, and therefore he should certainly vote with the hon. member for Lincolnshire, who had proposed a wider inquiry. Considering the universal depression which prevailed it was the duty of the House to institute an investigation into the circumstances, and to consider without prejudice or undue prepossession whether anything could be done by means of legislation to relieve the widespread distress which was still increasing. (Hear, hear).

Mr. PELL saw no reason to regret the passing of the Agri-

cultural Holdings Act. Unless hon. members could show that there were defects in it or that its operation had been actually prejudicial, to ask for a committee was exhibiting a sort of childish and inquisitive disposition. (Hear). There was one thing very remarkable about this debate, and that was that not a single suggestion had he heard in any of the speeches that the present depression in agriculture and trade could be remedied by legislative enactment. (Hear, hear). But unless hon. members had some idea of what they would propose by way of remedy, it was hardly fair to ask for a committee, about the constitution of which, if assented to, there would be immense difference of opinion. If there was to be any inquiry at all it would be better by way of commission than committee.

Mr. M. HENRY said that the depression, which nobody could dispute, existed in Ireland quite as much as in England or Scotland.

Mr. BROMLEY DAVENPORT desired, so far as his own experience went, to deny that the Act in question had been made a dead letter by tenants contracting themselves out of it. He sent round to his tenants a circular asking them whether they preferred to come under the operation of the Act or to remain as they were, and they preferred to remain as they were, tenants under six months' notice to quit, leaving their farms by will to their sons, subject to the approval of the squire as to one son being more acceptable than another. However feudal the arrangement might be, it showed at least that there was no want of confidence.

Lord SANDON said they had every reason to congratulate themselves upon the consideration which had been shown to a very large class of our fellow-countrymen who were suffering seriously at the present time. From every side of the House the same feeling had been shown, and the effect could only be soothing upon those who were struggling with the most difficult circumstances in which men could be placed. Though he did not agree with the motion of the hon. member for Banbury, he congratulated him upon the interesting speeches it had elicited. A clear case must be made out before the House could consent to submit to the judgment of a Select Committee an Act which had been only three years in operation. The promoters of the Bill did not anticipate that the Act would produce any rapid or revolutionary consequences, but they expected its effects to be gradual. It was wished to force all the tenants and landlords in the country to adopt the Act; but the object was to give security to tenants that they should receive compensation for the money they had laid out on their farms, and thus to secure benefits not only to the tenants, but also to the landlords and the whole country, by preventing farms from being ruined for an incoming tenant. The reason alleged for asking for inquiry was that the Act had been a dead letter and had been set at naught. There was, however, important testimony to the contrary furnished by the Central Farmers' Club of London, which in 1877 issued 700 or 800 circulars to farmers in every county, and received 250 answers, including 13 or 14 from Norfolk. It might be presumed that the answers given would be trustworthy, as representing the views of the tenant farmers on this question. The testimony of those who were summoned after one year's experience of the Act by the Farmers' Central Club sufficiently showed that tenant farmers throughout the country were, as to unexhausted improvements, as to notices, and as to agreements, in a much better position than before it was passed, and he therefore declined to accept the statement of the hon. member for Banbury that the Act was a dead letter (Hear, hear). For his part he backed the testimony adduced by the Farmers' Club against that of the anonymous correspondents of the hon. member, as to whom nothing was known by the House, and who, for all they knew, might be townsmen utterly ignorant of the subject as to which they wrote. It was a noteworthy fact that while for some months past it was known that the hon. gentleman intended to bring forward his motion he was not in a position to bring forward in its support a single letter from a tenant farmer, although if his case were a good one they might expect that the hon. member would have been armed with a sheaf of such letters (Hear, hear). In fact, the more the case of the hon. member was looked into the less it would be found capable of holding water. Great stress had been put upon the importance to the nation of agriculture, and there could be no doubt as to that; but were there no other matters of national importance? Were strikes not of national importance? Could not the same be said as to the prices of

commodities? But were they therefore to interfere in these cases? The argument of the hon. member was a dangerous one, but he had put forward another which was of a curious nature. The hon. gentleman said that produce had diminished. There was no doubt that it had. But why had it done so? Because they had a succession of four bad seasons—a fact which they all deplored; and yet the hon. member expressed surprise that increased capital had not been invested in the cultivation of the land. The hon. member had not made inquiries as to the working of the Act in Lincolnshire because, as he said, a custom prevailed there which rendered its application unnecessary; but surely it was a matter of notoriety that depression prevailed in Lincolnshire just as much as it did in any other part of the country (Hear, hear).

Mr. SAMUELSON reminded the noble lord that he never for one moment said the absence or presence of an agreement had anything to do with agricultural depression.

Lord SANDON accepted the hon. member's general disclaimer, but the whole current of his argument certainly seemed to point in the contrary direction. It supposed in some quarters that the landlords were averse to capital being brought upon their farms, but the reverse was the case. Any scheme which gave landlords a fair hope of getting more capital upon their farms they would receive with open arms. The hon. member by his motion opened up what appeared to be a very wide field. On this point it was important to notice the speech of the hon. member for Dungarvan, who said that the extreme wing of the Liberal party, of which he was a representative, would, if the present demand were granted, endeavour to push their views still further. Well, what would all this come to? He had taken some trouble to ascertain the real causes of the present agricultural depression, for that agricultural depression did exist had been brought out clearly in the course of the debate. It should be borne in mind, however, that it was only the landlords and tenants who were in a suffering condition. The depression, fortunately, had not yet touched the agricultural labourer, as was proved by the fact that during the past four years pauperism had been steadily on the decrease. Well, the causes of this agricultural depression appeared to him perfectly clear. There had been a very general and very unusual concurrence of circumstances unfavorable to agriculture. There had been four unusually bad seasons, and many farmers had not yet recovered from the terrible losses sustained by them through cattle disease. Concurrently with these bad seasons there had been cattle disease, which had caused the farmers to dread the purchase of stock except such as they knew the history of; the labour difficulty—one of the most serious with which the farmers had had to contend—and the difficulty arising out of the recent education legislation which had deprived the farmers of juvenile labour for ever—a most serious question, because such labour had from time immemorial formed an important factor in the farmer's calculation of his expenses and consequent profit. It had sometimes happened that in bad years the farmers were recouped by high prices; but this had not occurred in the present case. It was true that the prices of meat had increased considerably, but the stock of cattle had not increased in any such ratio, and the number of sheep—a most important item with the farming class—had absolutely decreased by 8 per cent. At the same time the prices of butter, cheese, wheat, barley, and oats also decreased very materially. The badness of trade in this country had a natural tendency to decrease the cost of freightage, and this fact was utilized by the American agriculturists and producers of food to send the products of their abundant harvests to this country. To sum up the figures in two groups, he would point out that from 1868 to 1878 the value of the annual imports of wheat, barley, oats, Indian corn, peas, and beans had risen from 40 millions to 60 millions, making a total rise of 20 millions sterling in ten years, while the value of the imports of live and dead meat and of butter and cheese had risen during the same period from 14 to 35 millions. He thought he had now shown that there was no mystery about the cause of the present agricultural distress, and that it was due in a great measure to the very unusual concurrence of bad seasons for four years together with the other causes which he had mentioned. We must hope for better times. There had been, as had been stated in the course of the discussion, periods of great depression before now from which agriculture had emerged like a giant refreshed. There were

good reasons now why we should expect improvement, although whether the expectation was absolutely to be relied on was another matter. The condition of the agricultural labourer, he might add, had been rendered more comfortable, and so far as experience went it might be hoped that having had a cycle of bad seasons they would be succeeded by a cycle of good ones. The question, then, was whether it would not be wise to have a committee of the House in the circumstances to inquire into the condition of agriculture. The examination could not be confined to one point of the subject. His hon. friend the member for Mid Lincolnshire could not be satisfied with that, while Irish members would be sure to press those points in which they took an interest. He believed, too, that the result of such an inquiry as that proposed might be the very reverse of what was desired. It would be something like calling in a doctor when his services were not absolutely needed. In the interests of agriculture itself he doubted whether any investigation was required. He should at the same time be the last man to contend that if the distress were to continue some inquiry might not be instituted either by means of a committee or of a Royal Commission. He was, however, of opinion that it was wiser at the present moment to refrain from entering upon any such examination. There was nothing recalcitrant in the causes of the distress, and he hoped, with the blessing of Providence and the return of more clement seasons, the British farmer would pull through it, and again set up the agriculture of these islands as an example to foreign nations without such interference as was now proposed (cheers).

The Marquis of HARTINGTON said that the noble lord had given them a very interesting account, drawn from the resources of the Board of Trade, of the present condition of agriculture, and, no doubt, to a considerable extent his statement was a very accurate one. But, as far as the motion before the House was concerned, he could not help thinking that the greater part of the noble lord's speech was absolutely irrelevant. (Hear, hear.) The noble lord assumed that his hon. friend the member for Banbury rested his case for a committee of inquiry on the present state of agricultural distress. His hon. friend, however, had carefully guarded himself against any such notion. His hon. friend had referred to the depression which existed in agriculture as well as in other branches of industry; but he distinctly explained that he founded his motion on entirely different grounds. The noble lord's remarks might be pertinent to the intended proposal of the hon. member for Lincoln, but that proposal was not now before the House. When the motion of the hon. member for Banbury and the amendment of the hon. member for Dungarvan had been disposed of, the motion of the hon. member for Lincoln might come on for discussion. He concurred with the noble lord as to the importance of the subject brought before the House with so much ability and moderation by his hon. friend. He sympathized deeply with those who suffered from the agricultural depression now prevailing, but the evil would not be without its advantage if it induced farmers and those interested in agriculture to take a somewhat wider view of their political responsibilities than they had been in the habit of doing. Agriculturists had good cause to interest themselves in a policy that must so deeply affect their own prosperity and the prosperity of the country at large. (Hear.) He could not help thinking these were considerations which must have forced themselves, and which would force themselves more and more, upon the attention of the agricultural community of the country. He could only say in conclusion that he regretted extremely that the Government could not see their way to granting an inquiry into the operation of the Act. He believed that there was a well-founded impression that it had failed to bring about that which it was passed to effect, and he thought that the time was very favourable for a full, impartial, and exhaustive inquiry. (Cheers.)

The CHANCELLOR of the EXCHEQUER said that no one expected the Act at once to produce a revolution; but it had produced a very considerable effect, and especially in two ways—viz., by changing the presumption of the law and giving facilities to limited owners. (Hear.) It was quite true that a sudden change had not been produced in all the relations between landlord and tenant in all parts of the country. But the effect of the Act might not have been the less for that. The period during which the Act had been in force was not a period in which the tenant was seeking to invest his capital and was kept back by the difficulties the landlord made, but



it was a time in which the landlord was only too anxious to get tenants to come and invest capital in farming his land. It was highly improbable that the evils against which the Act was meant to guard had much to do with the depression in agriculture. His noble friend had accounted for the depression by the bad seasons. But the noble lord said it was not the seasons; it was the policy of Her Majesty's Government. (Hear.) He said they had raised a great many expectations which had been entirely falsified. They had redeemed all their promises as to the Bill, and they had no more to do with the seasons or the cattle plague than the noble lord himself or his friends. It might be argued that it would be much fairer to say that the policy of the noble lord had prepared the way for the evils of which they had been speaking, though in truth neither one party nor the other was at fault. (Hear, hear.) Some persons might say that the revolution of the seasons, or the spots on the sun, or some other physical cause was chargeable—he would not go into questions of that sort; but at any rate the proposal of the hon. member for Banbury would not have the effect of meeting the distress under which the country was suffering; while as regarded the conclusion of the noble lord, he was bound to say that he saw no connection between the premises and the conclusion, except the connection that would be implied if the wish were father to the thought. (Hear, hear.)

Mr. SAMUELSON vindicated the accuracy of the statistics and information he had used in support of the motion, and offered some explanations.

After some remarks from Sir G. CAMPBELL, who advised the withdrawal of the amendment,

The House divided, and the numbers were—

For the motion ...	...	...	...	115
Against it ...	...	...	...	166
Majority ...	...	...	...	—51

The motion was therefore negatived, and Mr. O'Donnell's motion became the substantive question.

Motion made and question proposed, "That a Select Committee be appointed to inquire into the operation of the Agricultural Holdings Act, 1875, and into the conditions of agricultural tenancies in England and Wales."—(Mr. Bernhard Samuelson). Amendment proposed, to leave out from the word "That" to the end of the question, in order to add the words "there can be no adequate remedy for the agricultural depression existing throughout the country, and severely affecting also the interests of town labour, which does not, especially at this period of increasing foreign competition, protect the application of skill and capital to the soil by the establishment of compensation for unexhausted improvements, equitable appeal against exorbitant rents, and substantial security of tenure for the agricultural classes both in Great Britain and Ireland"—(Mr. O'Donnell)—instead thereof. Question put, "That the words proposed to be left out stand part of the question." The House divided:—Ayes, 115; Noes, 166.

## AYES.

Adams, Sir T. D.	Egerton, Adm. Hn. F. Monk, C. J.
Adam, Rt. Hn. W. P.	Errington, G.
Amory, Sir J. H.	Fawcett, H.
Anderson, G.	Ferguson, R.
Ashley, Hon. E. M.	Fitzwilliam, Hn. W. J. Noel, E.
Balfour, Sir G.	Forster, Rt. Hn. W. E. Nolan, Major
Bancay, J. W.	Fry, L.
Barracl, J.	Gladstone, W. H.
Bass, A.	Gordon, Sir A.
Baxter, Rt. Hn. W. E.	Gordon, Lord D.
Baxter, J. G.	Goschen, Rt. Hn. G. J.
Bake, T.	Gourley, E. T.
Blennerhassett, R. P.	Grant, A.
Bright, J.	Harrison, C.
Bright, Rt. Hon. J.	Hartington, Marq. of
Brue, Col. B.	Havelock, Sir H.
Brogden, A.	Hayter, Sir A. D.
Brown, A. H.	Henry, M.
Brown, J. C.	Herschell, F.
Burt, T.	Hibbert, J. T.
Campbell, Lord C.	Howard, Hon. C.
Campbell, Sir G.	Howard, E. S.
Cavendish, Lord F. C.	Iagram, W. J.
Cole, H. T.	James, W. H.
	Moore, A.
	Mundella, A. J.
	Muntz, P. H.
	Nolan, Major
	O'Brien, Sir P.
	O'Clery, K.
	O'Connor, D. M.
	Palmer, G.
	Parker, C. S.
	Parnell, C. S.
	Pender, J.
	Ramsay, J.
	Ransleigh, Sir C.
	Ruthbone, W.
	Read, C. S.
	Roberts, J.
	Rochechill, Sir N.
	de
	Samuelson, H.
	Shaw, W.
	Sheil, E.
	Simon, Mr. Sergeant

Colman, J. J.	James, Sir H.	Sinclair, Sir J. G. T.
Conynghame, Ld. F.	Jenkins, D. J.	Stevenson, J. C.
Courtauld, G.	Kensington, Lord	Stewart, J.
Courtney, L. H.	Law, Rt. Hon. H.	Swanston, A.
Cowan, J.	Lawson, Sir W.	Tavistock, Marq. of
Cowen, J.	Latham, E. A.	Tracy, Hon. F. S. A.
Cross, J. K.	Leferre, G. J. S.	Hanbury
Davies, D.	Lloyd, M.	Waddy, S. D.
Delahunty, J.	McArthur, A.	Walter, J.
Dilke, Sir C. W.	McClure, Sir T.	Wedderburn, Sir D.
Dodds, J.	McLagan, P.	Whitbread, S.
Dodson, Rt. Hn. J. G.	Martin, P.	Whitwell, J.
Duff, R. W.	Meldon, C. H.	Williams, W.
Earp, T.	Middleton, Sir A. E.	Wilson, I.
Edge, S. R.	Milbain, F. A.	Young, A. W.
Tellers for the Ayes, Mr. B. Samuelson and Mr. P. Phipps..		

## NOES.

Agnew, R. Vans	Hall, A. W.	Parker, Lt.-Col. W
Allcroft, J. D.	Halsey, T. F.	Pell, A.
Arbuthnot, Lt.-Col. G.	Hamilton, Ld. C. J.	Pemberton, E. L.
Archdale, W. H.	Hamilton, Lord G.	Pennant, Hon. G.
Arkwright, A. P.	Hamilton, Marq. of	Plunkett, Hon. R.
Ashton, R.	Hamilton, Hn. R. B.	Price, Captain
Bagge, Sir W.	Hamond, C. F.	Pulston, J. H.
Balfour, A. J.	Harcourt, E. W.	Raikes, H. C.
Baring, T. C.	Hardecastle, E.	Rendlesham, Lord
Barrington, Viscont.	Harvey, Sir R. B.	Ridley, Sir M. W.
Bates, E.	Hav, Rt. Hon. Sir	Rodwell, B. H.
Beach, Rt. Hon. Sir	J. C. D.	Round, J.
M. Hicks	Helmsey, Viscount	Russell, Sir U.
Beach, W. W. B.	Heygate, W. U.	Ryder, G. R.
Bentinck, Rt. Hon. G. C.	Hicks, E.	Sal, T.
Birkbeck, E.	Hill, A. S.	Sanderson, T. K.
Birley, H.	Holker, Sir J.	Sandon, Viscount
Blackburne, Col. J. I.	Hornblades, Visct.	Scatter-Booth, Rt.
Boord, T. W.	Home, Captain	Hon. G.
Boarke, Hon. R.	Hood, Capt. Hon.	Selwain-Isbetsen, Sir
Bousfield, Col.	A. W. A. N.	H. J.
Bowen, J. B.	Hubbard, E.	Severne, J. E.
Brooke, Lord	Isaac, S.	Shirley, S. E.
Brooks, W. C.	Johnson, J. G.	Sidebottom, T. H.
Burghley, Lord	Johnstone, H.	Smith, A.
Castlereagh, Visct.	Jolliffe, Hon. S.	Smith, Right Hon.
Cecil, Ld. E. H. B. G.	Jones, J.	W. H.
Chaplin, H.	Kennard, Col.	Smollett, P. B.
Christie, W. L.	Kennaway, Sir J. H.	Somerset, Lord H.
Cobbold, T. C.	Knowles, T.	R. C.
Cole, Col. Hon. H. A.	Lacon, Sir E. H. K.	Spinks, Mr. Serjt.
Cordes, T.	Lawrence, Sir T.	Stanchee, Hon. E.
Crichton, Viscount	Lechmere, Sir E.	Stanhope, W. T.
Cross, Rt. Hon. R. A.	A. H.	W. S.
Cuat, Henry C.	Legard, Sir C.	Stanley, Right Hon.
Dalrymple, C.	Leigh, W. J.	Col. F.
Davenport, W. Brom.	Leighton, Sir B.	Starkey, L. R.
ley-	Leighton, S.	Starkie, J. P. G.
Denison, W. E.	Lennox, Lord H. G.	Storer, G.
Dickson, Major A. G.	Leslie, Sir J.	Sykes, G.
Digby, Col. Hon. E.	Lloyd	Talbot, J. G.
Douglas, Sir G.	Lloyd, T. E.	Taylor, Rt. Hn. Col.
Edmonstone, Adml.	Lopes, Sir M.	Thornhill, T.
Sir W.	Lowther, Rt. Hn. J.	Thynne, Ld. H. F.
Egerton, Hon. A. F.	Macartney, J. W. E.	Trimayne, A.
Elphinstone, Sir J.	MacIver, D.	Tunoy, E.
D. H.	McGarel-Hogg, Sir	Wait, W. K.
Ewart, W.	J.	Wallace, Sir R.
Fellowes, E.	Makins, Col.	Watney, J.
Floyer, J.	Mandeville, Visct.	Watson, Rt. Hn. W.
Forester, C. T. W.	Manners, Lord J.	Welby-Gregory, Sir
Freemantle, Hn. T. F.	Marten, A. G.	W.
Garfit, T.	Merewether, C. G.	Wellesley, Colonel
Garnier, J. C.	Mills, Sir C. H.	Wheelhouse, W. S.
Gibson, Rt. Hon. E.	Muncester, Lord	J.
Giffard, Sir H. S.	Naghten, Lt.-Col.	Winn, R.
Gore-Langton, W. S.	Newdegate, C. N.	Wood, B. T.
Gregory, G. B.	Newport, Viscount	Wyndham, Hon. P.
	Northcote, Sir S. H.	Wynn, C. W. W.
	Ouslow, D.	Yarmouth, Earl of
	Pagel, R. H.	
Tellers for the Noes, Mr. O'Donnell and Major O'Bairne.		



# Agricultural Societies.

## ROYAL OF ENGLAND.

MONTHLY COUNCIL, WEDNESDAY, APRIL 2ND, 1879.

—Present: H.R.H. the Prince of Wales, K.G., President, in the chair, Earl Cathcart, the Earl of Powis, Lord Chesham, Lord Skelmersdale, Lord Vernon, the Hon. W. Egerton, M.P., Sir T. Dyke Acland, Bart., M.P., Sir A. K. Macdonald, Bart., Sir Brandreth Gibbs, Mr. Arkwright, Mr. Aveling, Mr. Aylmer, Mr. Bowly, Mr. Cantrell, Mr. Davies, Mr. Deat, Mr. Druce, Mr. Evans, Mr. Foster, Mr. Frankish, Mr. C. Howard, Mr. J. Howard, Mr. Bowen Jones, Colonel Kingscote, C.B., M.P., Mr. Leeds, Mr. Martin, Mr. Neville, Mr. Odams, Mr. Pain, Mr. Randell, Mr. Russell, Mr. Sanday, Mr. Sheraton, Mr. Torr, M.P., Lieutenant-Colonel Turbervill, Mr. Jacob Wilson, Mr. Whitehead, Mr. Wise, Professor Simonds, and Dr. Voelcker.

The following new members were elected:—

Allen, George, of Grove House, Stalbridge, Blandford.  
 Andrew, Charles, of Cloughton Court, Redditch.  
 Auger, John, of Canewdon, Rochford.  
 Ashburner, G. B., of Elliscote, Dalton-in-Furness.  
 Beak, William Edward, of The Manor, Somersford, Chippenham.  
 Beddoe, James, of Pembroke.  
 Biddolph Michael, M.P., of Ledbury.  
 Binney, C. H., of Ilford Lodge, Ilford.  
 Blacow, Wm. P., of Hornby, Lancaster.  
 Blott, John, of Whalebone House, Chadwell Heath, Essex.  
 Blyth, Thos. W., of Downham, Billerica.  
 Blyth, Robert A., of Holme-next-the-Sea, King's Lynn.  
 Bonnell, Charles, of 65, Westbourne Grove, Bayswater, W.  
 Brechley, William Henry, of Barnfield, Charing, Aashford.  
 Brittan, Alfred, of Farland Hill, Ashton, Bristol.  
 Bromley, Richard, of Lower House, Llanymynech, Oswestry.  
 Brown, George, of Graysham Hall, Barkingale.  
 Brown, John, of Wiggenby, Wigton.  
 Brown, W. C., of Appleby, Brigg.  
 Burfield, John, of Hailsham.  
 Burfield, Thomas, of Hailsham.  
 Burra, Henry, of Springfield, Rye.  
 Butcher, A. J., of Linton, Maidstone.  
 Calthrop, J. Sykes, of Weasenham-All-Saints, Swaffham.  
 Chapman, John, of Blisden Farm, Ongar.  
 Chapman, Thomas, of Peasmore, Newbury.  
 Christy, Fell, of Broomfield Road, Chelmsford.  
 Church, James, of Rainham, Romford.  
 Coney, Henry, of Cherry Orchard, Bath Road, Worcester.  
 Copestake, Sampson, of Burgess Hill, Hurstpierpoint.  
 Cowland, John Lethbridge, of Launceston.  
 Digby, John Thomas, of Birch, Colchester.  
 Dorman, Charles, of The Firs, Lawrie Park, Sydenham.  
 Dudgeon, Robert Francis, jun., of Cargen, Dumfries.  
 Dudley, Earl of, Witley Court, Stourport, Worcestershire.  
 Eden, Hon. Robert Henley, of The Coigne, Minchinghampton.  
 Elliot, Geo. W., of Langton Hall, Northallerton.  
 Emerson, H. J., of Billerica, Breatwood.  
 Farmer, W. G., of Hinckley.  
 Fisher, John Ismay, of Harworth, Tickhill, Notts.  
 Flatt, William Wolton, of Wantisden, Wickham Market.  
 Foulles, George, of Westrip Farm, Cherrington, Stroud.  
 Fountaine, A. C., of Narford Hall, Swaffham.  
 Francis, A., of Colchester.  
 Frank, R. John, of Ashbourne Hall, Derbyshire.  
 Fryer, William Goodwin, of Browick Hall, Wymondham.  
 Gamble, George, of Windlehurst, St. Helena, Lancashire.  
 Garnier, Russell M., of Market Place, Richmond, Yorkshire.  
 Garrard, Samuel Button, of 57, Westbourne Grove, W.  
 Garrett, Abraham, of Wyvenhoe Park, Colchester.  
 Gay, William, of Rush Green, Romford.  
 Gordon, William O., of Swinfen, Lichfield.  
 Green, Henry Egerton, of King's Ford, Colchester.  
 Green, Horace George Egerton, of The Bank, Colchester.  
 Green, Joseph, of Fordham, Colchester.

Gilbey, George King, of Romford.  
 Gobbitt, Henry M., of Capel St. Andrew, Woodbridge.  
 Godman, J., of Burgate, Godalming.  
 Goodchild, Wellington, of Great Burstead, Billerica.  
 Grimmer, Henry S., of Thorpe Hamlet, Norwich.  
 Hambro, Everard Alexander, of Roehampton.  
 Hunnam, Philip James, of Northbourne Court, Deal.  
 Hares, Thomas J., of Millen Heath, Pres, Saraphira.  
 Harvey, Jesse, of Greenhill, Pembroke.  
 Heath, Amédée J., of Coombe Hill, Croydon.  
 Helme, Edward J., of Hornchurch Lodge, Romford.  
 Hicks, Charles T., of Great Holland Hall, Colchester.  
 Hill, Henry Finch, of New Hall, Watford.  
 Hodges, Basil, of Vincent, Margate.  
 Holt-Beever, William Frederick, of Pencraig Court, Ros, Herefordshire.  
 Hughes, Roger William, of Martyn, Dowling, Holywell.  
 Hutchinson, George, of Brougham Castle, Penrith.  
 Jackson, Henry Wyld, of Haverill.  
 Jackson, John R. H., of Fulmeston, East Dereham.  
 Johnson, Robert, of Romford.  
 Johnson, Cathbert N. H., of Daventry, Northampton.  
 Kendall, Robert, of Guist, East Dereham.  
 Keyes, William, of Southchurch Hall, Southend-on-Sea.  
 King, Henry T. A., of Great Bardfield, Braintree.  
 Leamon, Philip, of Whitwell, Reopham.  
 Lees, Charles, of The Birches, Bagley.  
 Leigh, Lieut.-Col. Henry Cornwall, of High Leigh Hall, Keston, Leamington.  
 Longman, F. W., of Ashlyns, Great Berkhamsted.  
 McAnay, Samuel, of Aylesby, Grimsby.  
 Mansell, Alfred, of College Mill, Shrewsbury.  
 Marsden, Lieut.-Col. F. C., of Colne House, Earls Colne, Halstead.  
 Martin, John, of Bardes, Ulverston.  
 Mayer, John, of "Corporation Hotel," Derby.  
 Meeson, W. M., of Rittendon Place, Chelmsford.  
 Morgan, George, of South Weald, Brentwood.  
 Morgan, John, of Mile House, Oswestry.  
 Moss, J. Sidney L., of The Knells, Beeding, Hasting.  
 Newall, J. L., of Forest Hall, Ongar.  
 Newman, B. Harding, of Wood Hall, Newport, Essex.  
 Noakes, John, of Lamberhurst, Hawkhurst.  
 Norman, Rev. C. F., of Mistley Place, Manningtree.  
 North, Thomas, of Weston Court, Alresford.  
 Offin, Thomas William, of Rayleigh, Essex.  
 Ogilvy, Henry J., of Baldovan House, Dundee, N.B.  
 Oldham, Thomas M., of Southam, Rugby.  
 Owen, John Edgar, of Oldport, Oswestry.  
 Pannell, Henry, of Wildford Hall, Chelmsford.  
 Parkes, Henry, of Castlebourne, Belbroughton.  
 Parrie, Robert, of Oaklands, Notley, Braintree.  
 Parrish, Coulson Douglas, of Hunter's Hall Farm, Romford.  
 Pemberton-Barnes, W. H., of Havering-atte-Bower, Essex.  
 Phillips, Charles P., of 116, Fenchurch Street, E.C.  
 Polley, Samuel, of Copford Green, Colchester.  
 Poole, Edward, of Osterley Gardens, Southall, W.  
 Purdy, R. J. W., of Woodgate House, Aylham.  
 Rawlings, Charles Joseph, of Romford.  
 Raynor, Rev. George, of Hazleleigh Rectory, Maldon, Essex.  
 Reeve, William, of Manor Farm, Passenham, Stour Stratford.  
 Rich, George, of Victoria Road, Romford.  
 Robinson, John, of Westwood Hall, Leek.  
 Rolfe, Francis, of Wenden Lodge, Saffron Walden.  
 Rolfe, Henry, of Clavering, Newport, Essex.  
 Russell, Major Champion, of Stubbers, Romford.  
 Saville, E., of Tharby House, Woodford Bridge, Essex.  
 Savill, Philip, of Churchfield, Chigwell, Essex.  
 Sewell, Eade, of Little Oakley Hall, Harwich.  
 Shepperson, Arthur M., of Benwick, March.  
 Sheraton, Anthony Thatcher, Fair View, Emswore.  
 Smith, Daniel, of Laver Breton, Kelvedon.  
 Smith, Hugh Colin, of Mount Clare, Roehampton.  
 Smith, John, of Beacons, Ingatstone, Essex.  
 Small, W. G., of Easthall, Bradwell-on-Sea, Maldon.  
 Stewart, Sir Michael Robert Shaw, Bart., of Ardgro, Greenock.  
 Stimpson, B., of Morton-on-Hill, Norwich.  
 Stock, John James, of Fifty Grange, Dunmow.  
 Swarder, Henry, of Great Hallingbury, Bishop's Stortford.

Sworder, Henry, jun., of Stocking Pelham Hall, Buntingford.  
 Symonds, William, of North Weald, Epping.  
 Thomas, William, of Greave Farm, Wenvoe, Cardiff.  
 Thurgood, John Isaac, of Railway Hotel, Harlow.  
 Thurlow, George, of Hacheston, Wickham Market.  
 Thurlow, Thomas W., of Bloomville Hall, Hacheston, Wickham Market.

Tigey, Edward, of West Rudham, Swaffham.  
 Toller, Samuel, of Leatheringham Hall, Wickham Market.  
 Tolpott, Henry, of 33, Great St. Helens, E.C.  
 Temson, James John, of Barnet Green, Redditch.  
 Turner, Arthur, of Southam, Rugby.  
 Thwaites, John Thurlow, of Carleton, Forehoe, Wymondham.  
 Twadd, Walter, of Epping.  
 Teyford, John F., of Whalebone Lane, Blacontree Heath, Romford.

Vaughan, Thomas G. C., of Woodgate, Loppington, Wem, Salop.

Walker, Jacob, of Loudham Hall, Wickham Market.  
 Walker, William Henry, of Sheffield Hall, Brentwood.  
 Wiley, William Thomas, of Hanley, Staffs.

Ward, John, of Ramsdale House, Nottingham.

Watson, Henry, of Merrington Grange, Merrington, Durham.

White, Herbert, of Rawtheth, Chelmsford.

Widen, George, of Great Bromley, Little Bentley, Colchester.

Whitehead, B., of Park Hill, Higher Broughton, Manchester.

Whitlock, Walter, of Wethersfield, Braintree.

Wilmore, J. F., of Church Farm, Avening, Stroud.

Williams, John, of Debdon Hall, Loughton.

Williams, Thomas, of Alkington, Whitchurch, Salop.

Williams, T. R., of Caerwys, Flint.

Williams, William Ednyfed, Gwerclass, Corwen.

Willan, Frank, of Thornhill Park, Bitternes, Hants.

Wood, H. P., of Eastbury Manor, Hungerford.

Woodger, Edward, of 23, Westbourne Park, Villas, Paddington, W.

Woodward, Stephen, Earls Colne, Halstead.

Woolley, John, of Skimblescott, Much Wenlock.

Yall, Samuel, of Hampden House, Romford.

## FINANCE.

Col. KINGSFORD, M.P., (Chairman), presented the report, from which it appeared that the secretary's receipts during the past month had been duly examined by the Committee, and by Messrs. Quilter, Ball, and Co., the Society's accountants, and found correct. The balance in the hands of the bankers on March 31 was £5,942 18s. 5d. The quarterly statement of subscriptions and arrears to March 31 was laid on the table, the amount of arrears being £784. The Committee recommended that the Secretary be authorised to make arrangements with the London and Westminster Bank for the attendance of clerks, &c., at the London Exhibition; and that Mr. Randell and Mr. Davies be the Stewards of Finance.

This report was adopted.

## JOURNAL.

Mr. DENT (Chairman) reported that the spring number of the *Journal* had been published, and issued to members of the Society since the last meeting of the Council. The Committee recommended sundry payments for printing, illustrating, and literary contributions. This report was adopted.

## CHEMICAL.

Mr. DENT reported that in compliance with the architect's report, the Committee recommended the payment of £250 on account of the new Laboratory, in addition to the architect's fees. They also recommended a further payment to Dr. Voelcker on account of apparatus and chemicals. His staff for the present requirements of the new Laboratory was complete. It was opened for work on the 11th of March, from which date until the 1st of April as many as 108 samples had been received for analysis. The Committee recommended that the fees for examination for poisons, to be added to the list of members' privileges, be as follows:—For

metallic poisons, three guineas; for any other poison, five guineas. They also recommended that Mr. Neville be added to the Chemical Committee.

This report was adopted.

## VETERINARY.

The Hon. W. EGERTON, M.P., (Chairman), reported that the following letter had been received and approved of:—

Royal College of Veterinary Surgeons,  
 10, Red Lion Square, W.C., 26th March, 1879.

DEAR SIR,—The Council of the Royal College of Veterinary Surgeons have duly considered your letter relative to the prizes so liberally given by the Royal Agricultural Society for the encouragement of cattle pathology, and also the recommendation of the examiners for those prizes.

The Council acquiesced in the recommendation, and suggests that the competition should be open to all veterinary surgeons who have passed with great credit in cattle pathology (written and practical), although they may not have obtained honours in other subjects.

The Council think that such a scheme would tend to encourage the study of cattle practice among the students. This branch of veterinary science is carried on with difficulty in London, as cattle are rarely, if ever, sent for treatment to the Royal Veterinary College. The Council, however, have been glad to learn that the Royal Veterinary College have lately made arrangements to send a class of students, under a professor, twice or three times a week to the Metropolitan Cattle Market, and also to the foreign market at Deptford.

The Council also think that the extension of time to two years after taking the diploma will act favourably in inducing young veterinary surgeons to study cattle practice after obtaining their diploma.—I am, Dear Sir, yours faithfully,  
 (Signed,) WM. HY. COATES, Secretary.

H. M. Jenkins, Esq., Secretary.

Royal Agricultural Society.

The Committee have to report that the services of the Royal Veterinary College have been required in five cases by members of the Society during the past month. The Committee have received from the College the following reports on the outbreaks of disease:—

March 23rd, 1879.

SIR,—I have to report, for the information of the Veterinary Committee, that during the last three weeks I have made three visits into the country for the purpose of investigating cases of disease affecting either cattle or sheep.

One of these, and the only one now necessary to be published, was on March 8th, when I inspected a flock of sheep belonging to W. C. Morland, Esq., at Lamberhurst Court, Kent, among which several losses had recently occurred. The flock consisted of in-lamb ewes, 170 young ewes, and thirty old ones, which had been kept separate during the winter. At the time of my visit nine of the latter had died, and two of the former; several were ill, and fresh cases kept occurring day by day at shorter or longer periods after giving birth to their lambs. The malady was precisely of the same nature, and had for its origin allied causes to those which were reported on by my colleague—Professor Axe—to the Committee at its last meeting. As in the instances therein named, so in these, medical treatment proved of very little worth when the disease was fully established. It was therefore to preventive measures that attention had to be given, and especially to such as would lead to a richer and healthier quality of blood being formed for sustaining the organism under the additional strain made upon it by the act of parturition. For this purpose the innutritious grass, upon which the ewes had been mainly kept during the whole winter, was ordered to be discontinued to as great an extent as possible, and its place supplied by good hay, chaff, cake, corn, and a moderate quantity of mangels. Salt was also ordered to be given with the manger-food, and good protection afforded against inclement weather by placing the ewes at night in a warm lambing-yard. These means have proved effective for good, and I have no information of other cases having very recently occurred.

Enclosed with this report I send a communication from Professor Axe, giving particulars of an investigation he has made into an outbreak of splenic apoplexy among

animals belonging to Mr. Stratton, at Newport, Monmouthshire.—I am, Sir, your obedient servant,

JAS. B. SIMONDS.

H. M. Jenkin, Esq., Secretary,  
Royal Agricultural Society.

REPORT OF INVESTIGATION INTO AN OUTBREAK OF SPLENIC  
APOPLEXY IN A HERD OF BEASTS.

This inquiry was instituted on the 14th of March, in response to a communication received from R. Stratton, Esq., The Duffryn, Newport.

The disease first appeared on the 6th of March, in a two-year-old steer. This animal, together with another, occupied separate compartments in a shed adjoining some yards, in which 80 other beasts of all ages were housed. In the early part of January last the steer in question was brought from a farm several miles distant, and put up to fatten. In consequence of some temporary derangement of his teeth, mastication was much interfered with, which caused him to lose condition. An examination of his mouth led to the removal of the defective teeth, after which he rapidly accumulated flesh. To this sudden and extreme change in the condition of this animal I attribute the origin of the disease. After death, the carcass was removed to an adjoining barn, and there opened in close proximity to a heap of turnips. In regard to these turnips, inquiry showed that in the course of the *post-mortem* examination some of them became more or less covered over with the blood of the steer. Of these, some were disposed of, but it is to be feared from subsequent events, that blood-tainted roots reached the cows in the yard adjoining the barn, as one of them became affected with the disease, and died five or six days afterwards. I had an opportunity of examining the spleen from the last-named animal, and subsequently of making a detailed investigation into the condition of the blood which it afforded. In this, anthrax organisms (*bacillus anthracis*) were found in large numbers, and in the spleen, apoplexy with its attendant disruption of tissue, was strikingly marked. The measures adopted for arresting the progress of the malady had reference to the sanitary condition of the premises, the quantity and nature of the food used, and the general management of the herd.

Two days after my visit I was informed that another cow had died suddenly, but since that time I have reason to believe that no fresh cases have occurred.

J. WORTLEY AXE,  
Professor of Pathology and Morbid Anatomy  
at the Royal Veterinary College.

Mr. DENT wished to call attention to a paragraph in the letter from the Royal College of Veterinary Surgeons, which stated that such a scheme as that recommended by them would tend to encourage the study of cattle practice amongst the students, and that this branch of veterinary science was carried on with difficulty in London as cattle are rarely, if ever, sent to the Royal Veterinary College for treatment. At the present time agriculturists were very much in the hands of veterinary surgeons with respect to the slaughter of animals for almost every kind of disease, and they were told, officially, that in the education of veterinary surgeons they very rarely had an opportunity of seeing disease in cattle, sheep, and pigs. A wonderful improvement, it was stated, was about to be adopted by sending the students once or twice a week to the Metropolitan Meat Market, and to the Foreign Market at Deptford. It struck him that this arrangement would be on a par with sending medical students to study human diseases by seeing people who attended markets and fairs. He was quite aware that since Colonel Kingscote and other gentlemen had become governors of the Royal Veterinary College great improvements had taken place, and that efforts were being made to give veterinary students the requisite education; but would it not be possible for these young men to serve an apprenticeship with veterinary surgeons in the country, before going to the Royal Veterinary College? At present agriculturists were so much under the power of the Veterinary Department and of veterinary surgeons, that it was extremely important that the study of veterinary science should be

more carefully attended to in the future than it had been in the past. He made these remarks in the hope that the Royal Veterinary College might propound some scheme to give their students further instruction, and he was confident that the Council would be prepared to render all the support they could, both pecuniarily and otherwise.

Colonel KINGSCOTE, C.B., M.P., agreed most thoroughly with every word which had fallen from Mr. Dent with respect to the great necessity of veterinary surgeons being competent in their profession, especially as regards cattle, sheep, and pigs. The power now wielded by these gentlemen under the new Contagious Diseases (Animals) Act was very great, and it therefore behoved the Royal Veterinary College to put that education before their students which would fit them to exercise this power with discretion. As long as he had the honour of being a governor of that college he would do all in his power to provide that the requisite instruction should be given, but it must not be forgotten that there were great difficulties in the way. The college now undertook to accept patients *gratis*, for the purpose of giving students an opportunity of seeing different diseases in various stages, but that offer had been very slightly responded to. He was not at all sure that the scheme of Mr. Dent, as to students being placed with veterinary surgeons in the country, might not be promoted by arrangement between the Royal Veterinary College and the Royal College of Veterinary Surgeons; at all events he would take care that the subject was brought before the governors of the Royal Veterinary College.

The report was then adopted.

#### IMPLEMENTS.

Mr. G. H. SANDAY (Chairman) reported that the Committee had revised the list of ancient and modern implements offered for exhibition, and that they recommended that those selected by them be accepted.

The Committee further recommended that the modern implements required for the comparative museum be selected from those which have gained the Society's latest first prizes in the several classes required; that the old implements must arrive at the exhibition grounds before June 1st; and that, subject to there being room, notice be given to those exhibitors who have applied for 200 feet of shedding, and that a further space, not exceeding 200 feet, will be allotted on application.

This report was adopted.

#### LONDON EXHIBITION.

Colonel KINGSCOTE (Chairman) reported the following recommendations of the Committee:—1. That the offer of Messrs. Shand, Mason, and Co., to supply a certain number of steam and manual fire-engines for use in case of need, be accepted. 2. That Mr. Benson's offer to supply a striking clock to the tower at the entrance to the members' club, on the terms proposed, be also accepted. 3. That the secretary be authorised to deal with various matters relating to the land adjoining the show-yard, to make arrangements with the police authorities respecting the number of men to be employed during the exhibition, and also as to the sale of season tickets, and the preparation of a list of lodgings to be let during the period of the exhibition. It was further recommended that the entrance fee to non-members for the exhibition of goats be reduced to 10s. each, and that the prices of admission to the exhibition should be as follows:—Monday and Tuesday, June 30th and July 1st, 5s.; Wednesday and Thursday, July 2nd and 3rd, 2s. 6d.; Friday, Saturday, and Monday, July 4th, 5th, and 7th, 1s.; and season tickets for the whole of the exhibition, 2s. 6d., including re-admission.

This report was adopted.

## HOUSE.

Colonel KINGSCOTE reported the recommendations of the Committee as to the purchase of certain office and household requisites.

This report was adopted.

## SELECTION.

Earl CATHCART (Chairman) reported the recommendations of the Committee in reference to the election of Stewards of Foreign Live Stock. This report was adopted; and Lord Vernon, Mr. Chandos-Pole-Gell, and Mr. Wise were elected Stewards of the Foreign Department of the Exhibition accordingly.

The following list was prepared of members of Council who retire by rotation, but are desirous of re-election, showing the number of attendances at Council and Committees of each of such members during the past two years in accordance with the following section of Bye-law No. 13:—

\* (a) A list of the Members of the Council who retire by rotation, but are desirous of re-election, showing the number of attendances at Council and Committee Meetings of each of such Members during the past two years, shall be prepared at the April Council, and published immediately in at least two agricultural papers. Any two Governors or Members may nominate in writing to the Secretary before the first day of May following a Member or Members or the Society desirous of being nominated for election on the Council; these nominations, with the names of the proposer and seconder, shall also be added to the previously published list, and the entire list shall be published on the same agricultural papers immediately after the May Council, and be also printed for the use of Members at the General Meeting in May. Bye-law 13, Sec. a.)

ATTENDANCE, FROM THE RISING OF THE LIVERPOOL MEETING, IN 1877, TO THE PRESENT TIME.

NAMES.	Mon. Coun- cils, Total.	Committees.	
		No. of Meet- ings.	At- tend- ances.
Aveling, T., Rochester, Kent	13	62	53
Aylmer, Hugh, West Dereham, Stoke Ferry	8	22	9
Cantrell, Charles S., Riding Court, Datchet, Bucks	14	31	26
Chandos-Pole-Gell, H., Hopton Hall, Wirksworth, Derbyshire	10	61	47
Davies, David Reynolds, Agden Hall, Lymm, Cheshire	7	7	5
Evans, John, Uffington, Shrewsbury, Salop	4	12	1
Feversham, Earl of Duncombe Park, Helmsley, Yorkshire	7	4	—
Howard, Charles, Biddenham, Bedford	7	23	16
Jones, J. Bowen, Enadon House, Shrewsbury, Salop	11	72	60
Leeds, Roberts, Keawick Old Hall, Norwich	13	11	6
Loppe, Sir Massey, Bart., M.P., Maristow, Roborough, Devon	1	10	—
McIntosh, David, Havering Park, Romford, Essex	9	10	4
Martin, Joseph, Highfield House, Littleport, Isle of Ely, Cambs	10	26	13
Pain, Thomas, The Grove, Basingstoke, Hants	9	15	5
Ramsome, Robert Charles, Ipswich, Suffolk	11	40	20
Ravenworth, Earl of, Ravensworth Castle, Durham	4	4	1
Ridley, Sir M. White, Bart. M.P., Blagdon, Cramlington, Northumberland	5	51	16
Rigden, William, Hove, Brighton, Sussex	—	5	—
Russell, Robert, Horton Kirby, Dartford	11	5	3
Seencer, Earl, K.G., Althorp, Northampton	3	—	—
Torr, John, M.P., Carlett Park, Eastham, Chester	6	9	2
Turner, George, Great-Bowley, Tiverton, Devon	3	25	5
Turner, Jabez, Haddon, Hunts	6	28	9
Wakefield, William H., Kendal, Westmoreland	8	49	24
Wilson, Jacob, Woodhorn Manor, Morpeth, Northumberland	9	56	44

The following letter was read from the Science and Art Department:—

March 14th, 1879.

SIR,—In reply to your letter of the 7th instan<sup>t</sup>, I am directed by the Lords of the Committee of Council on Education to state that the Diploma of the Royal Agricultural College, Cirencester, and the First Class Certificate of the Royal Agricultural Society will be accepted by the Department as qualifying the holders to earn payments on the results of their instruction in the Principles of Agriculture without undergoing the ordinary examination.—I am, Sir, your obedient servant,

J. F. D. CONNELLY, Lieut.-Col.-R.E.

H. M. Jenkins, Esq., 12, Hanover Square, W.

Mr. JACOB WILSON thought that, having heard that letter read, it was not an inopportune moment to draw the attention of the Council to the present unfortunate condition of affairs at the Agricultural College, Cirencester. Anyone who had read the agricultural papers lately must have felt regret at the state of things, which would, he feared, jeopardise the future success of that Institution, which had hitherto been regarded as a national one. It was now twenty-five years ago since he was a student within the walls of the College, and he could not help looking back with satisfaction to the knowledge he had acquired there, and the many advantages which it had given him. The College was then under the charge of Mr. Haygarth, as Principal, with Dr. Voelcker, and Messrs. Brown, Buckman, and Coleman as Professors,—men of eminence in their several departments. Since that time matters had not gone on satisfactorily, and he feared that the College was fast drifting into a state of chaos. He might be asked what the Council had to do with the private quarrels of another Institution, but he hoped to be able to show that the question affected them very closely. They must remember that the question of education was a very important element in the Society's Charter, and he need not remind the members of Council of the efforts made by their friend, the late Mr. Holland, to put that question on a proper footing. Well, things had gone on from the small beginning inaugurated by him till at the present moment agricultural education formed a very important element in the Society's operations, and he was sure that the reports of the Education Committee, under the chairmanship of the Duke of Bedford, possessed very great interest for the public at large. By offering prizes and certificates the Society had identified itself with agricultural education, and to a very large degree the College at Cirencester had furnished the candidates for these prizes and certificates, so that the connection between the College and the Society was at once apparent. The Council of the Society had recently induced the Science and Art Department of the Privy Council to give to the diploma of the Royal Agricultural College the same value as a University degree, and the first-class certificate of the Society. As regarded the present holders of the diplomas, this action of the Council was amply justified by the nature and extent of the instruction and knowledge which had hitherto been necessary to obtain that distinction; but he wished to point out that since the Council had succeeded in giving the diploma this additional value the whole of the teaching staff had resigned, with the exception of the Professor of Agriculture, who was formerly the manager of the Society's experimental farm at Woburn; therefore, it was clear that the means of giving efficient agricultural education at the College had been greatly diminished. Under these circumstances he wanted to know if it was the intention of the Council to ascertain whether the instruction at the Royal Agricultural College in the future would be as efficient as in the past, and if not, whether the Council would accept the responsibility of advising the Government to give the diplomas issued by the College in future

the same value as those which had hitherto been gained. He begged to move: "That the question be referred to the Education Committee to consider the report to the Council whether any, or if any, what action the Council should take under the circumstances with reference to the latter just read."

Colonel KINGSCOTE (as one of the governing body of the College) said he was placed at some disadvantage, for, although Mr. Wilson had communicated to him his intention to raise this question that morning, he was unable to refute his arguments at such short notice. He could not help thinking that Mr. Wilson was in a very great hurry. Why should not the education at the College go on in the same way as heretofore, although it had lost one, two, or three of its former professors? Referring to the discussions in the agricultural press, Colonel Kingscote submitted that while numerous letters and articles antagonistic to the governing body of the College had been published, the writers had not sufficient grounds to go upon, as the other side had not yet been heard. He really did not know what Mr. Wilson wished to do, or, for that matter, why the Council should trouble itself about the question at all. He thought that time should be given, in order that it might be ascertained for certain whether the education at the College had suffered or otherwise by the recent changes. Professors went to the College as young and unknown men, and if they got a good man, he frequently obtained a better appointment than the College professorship; and thus many of the changes in the staff, which had been so much noticed, could be explained. He could not allow Mr. Wilson's proposition to go forth without protesting against it, and also recording his vote in the same way.

Mr. AVELING, as the father of a late pupil at the College, and knowing several friends whose sons were pupils there, remarked that the confidence which ought to be felt in the Principal did not exist at the present time; and that public confidence was likely to be weakened rather than strengthened by the appointment of Mr. Cathcart to the post of Professor of Agriculture, seeing that he was recently dismissed by the Society from his position as manager of the Crawley Farm.

Earl CATHCART hoped the discussion would now cease, as, in his opinion, the Council had no right to interfere with the management of Cirencester College.

Mr. BOWEN JONES observed that the unfortunate troubles at Cirencester must be of interest to those who had the cause of agricultural education at heart, and although it might at first sight appear a somewhat inopportune moment to bring the matter forward, he, as an old student, did not think Mr. Wilson's proposition was at all out of place, because, as had been pointed out by him, it was on the recommendation of the Council that an additional value had been placed on the diploma of the college, by the action and at the request of the Society. Considering that the Society had for several years taken a leading position in fostering the agricultural education of the country, the Council ought to take notice of anything which would tend to deteriorate it; and as the Society was now identified with the College, he thought it only right, in the present instance, that the matter should be brought forward. He therefore seconded Mr. Wilson's motion.

Mr. DENT protested against the Education Committee being made a Committee of Inquiry into the quarrels of the professors of the Agricultural College with the Principal. He was inclined to think that the Council had interfered in asking the Government to accept the diploma of the College as a qualification for a teacher of agriculture, but, having done one wrong thing, he asked them not to commit another wrong by attempting to pre-

judge the question under discussion; and he hoped that His Royal Highness would rule the question out of order.

Mr. BOWLY said that, as one of the Governors of the College, and holding his own particular views of the dispute in question, he would not make any remark further than to say that he thought Mr. Wilson would do well to defer his proposition.

In reply to some further remarks from Mr. Dent,

Mr. JACOB WILSON said he did not wish to inquire into the conduct of any one whatever. He simply wished to ask whether the Education Committee would recommend the Council to continue to be responsible for the concession which they had recently obtained from the Science and Art Department in reference to the Agricultural College.

The Hon. W. ESKERTON, M.P., then moved the previous question, which was seconded by Mr. DENT, and carried by 17 votes to 8.

The Council then adjourned till Wednesday, May 7th.

### SHORTHORN.

A meeting of the Council of this Society was held at the Society's Rooms, 12, Hanover Square, W., on Tuesday, the 1st ult. Present—The Earl of Dunmore, President, in the chair, the Earl of Bective, M.P., Lord Penryhn, Lord Skelmerdale, Colonel Kingscote, C.B., M.P., Mr. Hugh Aylmer, Mr. H. Chandos-Pole-Gell, Mr. H. W. Beauford, Mr. John B. Booth, Mr. S. P. Foster, Mr. Charles Howard, Mr. D. McIntosh, Rev. T. Staniforth, Mr. G. Murton Tracy, and Mr. Jacob Wilson.

The following new members were elected:—

Angus, John Howard, Collingrove, Adelaide, South Australia.

Leslie, Hon. G. Waldegrave, Leslie House, Leslie, Fife.  
Nelson, Joseph, Maiden Hill, Penrith.  
Riddell, James, Hindlip Court Farm, Worcester.]

### EDITING COMMITTEE.

Colonel KINGSCOTE reported that the Committee had examined the pedigrees of several animals sent for insertion in the forthcoming volume of the Herd Book, some of which they had rejected, and had directed the Secretary to communicate with the breeders of the others.

This report was adopted.

### GENERAL PURPOSES COMMITTEE.

Mr. D. MCINTOSH reported that the accounts for the month of March had been examined by Messrs. Quilter, Ball, and Co., and the Committee, and were found to be correct; that the Secretary's petty cash account had been examined and passed, and showed an expenditure of £11 18s. 7d. during the past month; that the receipts for the same period had been £153 17s. 6d.; the balance of the Society's current account at the bankers' being £482 13s. 8d.; and that in accordance with the resolution of the Council at its last meeting, the further sum of £500 (less expenses) had been invested in the 3 per cent. Consols.

This report was adopted.

The next meeting of the Council was fixed for Tuesday, the 6th of May, at 3.30 p.m.

### HIGHLAND AND AGRICULTURAL.

The monthly meeting of the directors of this Society was held on Wednesday in Edinburgh—Mr. Ferguson Kinnochty in the chair.

### CHEMICAL DEPARTMENT.

At the meeting of the Board on the 6th March, the suggestion contained in the minute of the committee of the 26th of February as to the chemist being authorised to make analyses was approved of, and it was remitted back to the committee to make arrangements for carrying it out. The committee

accordingly held a meeting on the 12th March, when it was suggested that the directors should authorise Dr. Aitken to act as analytical chemist to the Society, as well as chemist in charge of the agricultural stations. From the report it appeared that Dr. Aitken produced to the committee a leaflet containing the scale of charges now made by him, and which, he informed the committee, was the same as charged by other first-class analytical chemists in Scotland. The committee recommended that the scale of charges be approved of by the directors. The committee also suggested that in all cases where a member of the Society had submitted to the chemist of the Society a sample of manure or feeding stuff, along with the written guarantee under which he purchased it, and upon analysis the said manure or feeding stuff was found not to coincide with the written guarantee within certain limits to be hereafter determined, the chemist should forward the analysis to the seller for explanation, and should report the case along with the written guarantee, his analysis, and the explanation of the seller (if any) to the directors for disposal. The committee further suggested that publicity should be given to the proposed action, if adopted, and that, where necessary, the name of the defaulter should be published in the newspaper report of the directors' meeting.

Dr. AITKEN said he hoped it would be clearly understood that the Society, in dealing with this subject, had no desire to interfere with the working of the various agricultural associations throughout the country.

For the instruction of members, he had written a few short directions upon this matter, which, if carefully carried out, would, he believed, greatly diminish the causes of complaint regarding discrepant analyses. He had also prepared a few instructions with the view of enabling members unacquainted with chemistry to interpret the results of analyses of manures as usually supplied in analytical reports. He thought if these were considered in committee, and received the approval of the directors, they would be found very useful.

Mr. MACKENZIE of Portmore reported that he had been making inquiries as to how the matter should be carried out, and the directors remitted back to the committee to frame a plan of procedure, and report to next meeting.

#### AGRICULTURAL EDUCATION.

A meeting of the Society's Council on Agricultural Education was held immediately after the directors' meeting, when the report of the examiners was submitted, from which it appeared that the following had passed:—

*For Diploma.*—John Malcolm Aitken, Crieff (24 St. Andrew Square, Edinburgh); John Craig, Innergeldie, Comrie; James Cannan, Urieoch, Castle-Douglas; Arthur E. Brooke Hant, B.A., Trinity College, Cambridge, Peers Court Dursley, Gloucestershire; John Wilson, jun., Fairfield, Lorton, Cockerham.

*For First-Class Certificate.*—Michael Falcon, Stainburn, Workington; Lawford D. Gover, Findon, Worthing.

*For Second-Class Certificate.*—James M'Laggan, Coble-bough, Dinnet, Aberdeenshire; Robert M. Malloch, Ballhaldie, Braco, Perthshire; Robert Menzies Traill, Orkney.

PERTH SHOW, 1879.

The Board approved of the usual letters to the conveners of the counties embraced in the district connected with the show, and to the Lord Provost of Perth in regard to the appointment of the local committee. The numbers to be named by the different counties were arranged as follows:—Eastern division of Perthshire, 10; western division of Forfarshire, 8; Fifeshire, 10; Kinross-shire, 4; and city of Perth 6.

#### POTATO PLANTERS.

The report on the trial of potato planters, invented and made by Messrs. G. W. Murray and Co., Banff, which took place on the Farm at Niddrie Main, Liberton, on the 25th March, stated that—

The two-drill machine was tried both with old seed (seconds) and cut-seed potatoes. It did not work in a manner so as to enable the committee to recommend it. The seed was not dropped equally, and a good many blanks left; also, a cup chain gave way which put a stop to one of the sides working during the most of the trial. The one-drill machine was then thoroughly tested with both kinds of sets, and performed its work very well, so much so that in counting over a hundred sets dropped only two blanks were found. This machine had the advantage of the drop-spout being much nearer the ground than the other, which enabled it to deposit the seed more

regularly, and the work was, upon the whole, satisfactorily done. The committee think that the machine might be further improved, especially by altering the construction of the wheels in such a manner as to enable them to keep steadily on the top of the drills when at work. The price—£7 7s.—being moderate, and the mechanism strong and simple, and not likely to go out of order, the committee feel justified in commending it, and recommend the directors to award a medium gold medal.

The Board approved of the report, and the medal recommended was accordingly voted to Messrs. G. W. Murray and Co., Banff, for their one-drill potato planter.

#### BRITISH DAIRY FARMERS'

The first monthly meeting of the Council was held at the new offices, 44B, Strand, on Tuesday, the 1st ult. Mr. E. C. Tisdall, of Kensington, presiding.

It was resolved that a deputation should wait upon the Council of the Royal Agricultural Society to confer with that body with reference to offering medals of the Association for dairy stock and produce at the London Exhibition.

A resolution was proposed by Mr. H. S. HOLMES PEGLER, to alter the title of the Society to the "Royal Dairy Farmers' Association of Great Britain and Ireland," on account of the recent patronage bestowed upon it by H.R.H. the Prince of Wales. After some discussion the resolution was withdrawn, to be put on the agenda of the next meeting, in order to obtain the views of other members of the Council not then present.

The same result attended a motion on the part of Mr. T. NUTTALL, who proposed that "in view of the forthcoming international exhibition, to be held in London by the Royal Agricultural Society, which included amongst its exhibits dairy stock and produce, it is undesirable for this Association to hold a Dairy Show this year.

Professor AXE then addressed the meeting, and desired to know how far the Association intended to extend its operations—whether it was intended to confine them strictly to the encouragement and support of dairy enterprise, or whether it would also have regard to the more general interest of dairy farmers. He was induced to submit the question in consideration of the serious consequences which had recently befallen a dairy farmer in the neighbourhood of London, arising out of the report of a sanitary inspector. He said it would probably be known to some members of Council that a short time ago a serious epidemic of diphtheria prevailed in the neighbourhood of Kilburn and St. John's Wood. In consequence, the Local Government Board instructed Mr. Power to inquire into the cause of the malady, and that there had since issued a report in which the outbreak of throat illness is ascribed to milk derived from a certain dairy, and it is further suggested that the infection had its origin in the cows themselves. The remarkable nature of Mr. Power's conclusions led him to institute an inquiry as to the possibility of such an occurrence; and he had arrived at the conclusion that there was no foundation whatever for the inference that the disease in question had any real connection with milk. The proprietor of the dairy, he said, had suffered a most serious loss by the report; and the question he wished to submit was whether, while recognising the importance of sanitary science, the Association would at the same time take steps to assist in protecting the dairy interest. He thought that whatever might be the immediate intentions of the Council, provisions should be made by the Articles of Association for freedom of action in any emergency of the kind that may arise.

The CHAIRMAN remarked that the subject was a very important one, and well worth the serious attention of the Council. He was glad the Professor had brought the matter forward, but proposed that it be adjourned to the ensuing meeting, with the view to select a Committee of scientific men, who should be specially deputed to deal with such cases.

The report of the Registration Committee was then read upon the "Memorandum and Articles of Association," and on the motion of Mr. R. Dale it was resolved to add, in Clause III., to the words, "To improve the dairy stock, the dairy produce, and the dairy husbandry of this country," the words, "and to do all such further acts and things as shall be conducive to their interests."

The report, with this addition, was then adopted, instructions being given for the printing of the "Articles," for distribution amongst the members.

The meeting then adjourned to Tuesday, May 6th.

**ERRATUM.**—In the report of the last meeting of Council the name of J. Whittaker was omitted in the list of the Journal Committee.

### ENGLISH CART HORSE.

The usual monthly meeting of the council of this society was held on April 1 at the Inns of Court Hotel, Holborn. Present—Earl Powis (in the chair), Sir W. F. Folkes, Bart., Hon. Edward Coke, Major Dashwood, Mr. W. Gilbey, Mr. James Howard, Mr. Thomas Brown, and Mr. G. M. Sexton, secretary.

#### FINANCE.

Mr. WALTER GILBEY proposed—

"That the minute of council, May 20th, conferring on the Editing Committee power to pass accounts, be rescinded and be placed before the council for confirmation at next meeting."

This was seconded by Mr. T. BROWN, and adopted.

Mr. GILBEY then proposed, as a recommendation from the Finance Committee, "That a balance sheet of the accounts of the Society be prepared by the accountant, Mr. J. Harris, up to December 31st, 1878; and that a further statement of the Society's affairs up to 1st of May be drawn out and laid before next meeting."

This was seconded by Major DASHWOOD, and agreed to.

The SECRETARY mentioned that the agreement with Mr. R. Reynolds had not been sent to him, as the seal of the Society, which was not yet ready, had not been affixed. The Secretary read a letter from the agent to the Duke of Bedford inquiring "what objection exists to fixing 'limited' to the Company's title." The Secretary was requested to say that the Society did not see any necessity for it, as it was not required by the Board of Trade as explained in rule 5 of the articles of association.

The Council adjourned till Tuesday, May 6th, at 12 o'clock.

## Farmers' Clubs.

### SEVENOAKS.

A meeting of the members of this Club was held on April 1st, Mr. T. S. White in the chair. Mr. G. Tanner, who was to have read a paper on "The Present Depressed State of Agriculture and its Future Prospects" being ill and unable to attend, a desultory discussion of the topic took place.

Mr. W. W. MILL said his impression was that the man who invested his capital in land should be fairly remunerated for it. But their money was not turned over sufficiently fast for that. He would ask, then, did they see one bright star on the horizon of agriculture? There was one—meat, which was the only redeeming point, but that was departing. We had now brought to our shores not only the carcasses of beasts, but live beasts, sheep, and pigs, besides large quantities of all kinds of dairy produce and fruit. The meat had been pronounced to be of superior excellence, and its only drawback was the getting it to our markets, for with the free pasturage, the cost of production was but small. He feared the home producer would have some difficulty in the future, even in that direction, in competing with the foreigner. Going back to protection would not help the farmers in their troubles, that was impossible. Then what must they do to relieve that depression? He had said that he would not reduce the labourer, but he admitted that it was his firm belief that rents must be lowered, and that there must be a great reduction or remission of taxation. He concluded by some observations on tithes, especially on the extraordinary tithe, suggesting that there was an under-current at work which would result in a great agitation on the subject before long.

Mr. MONCKTON said he thought when he hired his farm tithe free he was doing something good, but now he did not think that he got that great benefit from it that he had expected, as it was in his rental, and he had to pay income-tax upon it. He did not feel the malt-tax to be an injustice, and he would like to ask what tax they were to have its place?

Mr. BEALE: Income.

Mr. MONCKTON, continuing, said the farmers did not pull right when election time came. Why did they not look about and get a man who would do them some good. But they selected a landlord, a landlord's son, or a lord with money, and if he got in it was not likely that he was going to try to relieve them. No, they must put their own shoulders to the wheel. Why did they not, like Norfolk, look out a man like Mr. Clare Read. He agreed with Mr. Mill that they did not want to lower their labourers, but they wanted to increase the standard of their work. He did not think a labourer's money was one-halfpenny too much, but his work of late had been done very badly, and they had not been in a position to complain, for if they did he left them.

The CHAIRMAN thought farmers must practise economy at their homes, have lower rent, tithe, and labour, and tradesmen's bills, for it was only by so doing they could meet the present state of things.

## Chambers of Agriculture.

### BANBURY.

At a recent meeting of this Chamber, Mr. N. Stilgoe presiding.

Mr. CADBURY reintroduced the subject of his paper read at the last meeting on "The Vast Excess of Poor and Police Rates paid on Land, &c., in Agricultural Districts, as compared with the Licensed Manufacturers of, and Dealers in, Alcoholic Drinks in the same Districts."

Mr. CADBURY said that since the last meeting he had applied, through Mr. Samuelson, M.P., to see if they could have returns of the county of Oxford and some of the northern counties—such as Lancashire and Yorkshire—showing how much the land and the agriculturists paid to the rates and how much was paid by the brewing interest, public-houses, beer-shops, grocers, and so on. The answer was that the Government had no objection to granting the returns, seeing the importance of the matter, but they did not want to incur greater expense at the present time than they could help. The total amount of rates paid in the agricultural district of the union for the year was £15,749, and of this the drink trade paid £153 and land £15,610. If this was not enough to raise their indignation, he did not know what was. He thought the agriculturists in this neighbourhood should appeal to the Government for some help in this matter, and he concluded by moving the adoption of a petition to Parliament in favour of enacting such a law as would give the inhabitants the right of controlling the issue and continuance of public-houses licenses.

After some discussion the resolution was outvoted.

The Malt Tax was next discussed, and the following resolution was agreed to—

"That in the opinion of this Chamber the Malt Tax is an injustice to the farmer, and that the revenue now obtained from malt might be advantageously collected by an impost on beer."

### GLOUCESTERSHIRE.

A general meeting of the Gloucestershire Chamber of Agriculture was held recently, at Gloucester. The chair was taken by the President, Mr. Wm. Priday.

The County Boards Bill was discussed, and the following resolution moved by Mr. W. LAWRENCE, was carried:—

"That this Chamber views with regret and dissatisfaction the County Government Bill, inasmuch as it still retains the control of the public purse in the hands of quarter sessions, and requests the Central Chamber of Agriculture to use every effort to obtain for the county board absolute control over the expenditure of all public monies."

Mr. JOHN WOODWARD, of Uckington, opened a discussion on "The causes of agricultural depression." He thought few were aware how serious the affair would ultimately become to the farmers of this country. He had had a large arable farm for the last eight years, and had made a profit in two years (1870-1), but had lost in the remainder. The causes, he said, were both natural and artificial. He thought it time for a radical remedy of some kind. It was possible members of the Chamber would not all agree as to remedies, but they would,

he thought, concur in thinking that the crisis was too important to leave altogether in other hands. He would say, "Then send men of your own class to Parliament, and let them demand for you equality before the law, as regards the law of distraint, and either a repeal of the malt tax or a corresponding duty on foreign wheat. The experiment of sending your own class to Parliament has been tried and has not failed:

"You have Pell and Sewell Read—  
Send more of the same breed."

He moved—

"That in the opinion of this Chamber the law of distraint, in so far as it adds to new takings of land, should be at once repealed; and, secondly, that the malt tax, being in the altered state of the land laws no longer bearable by the landed interest of this country, be repealed, or otherwise a compensating duty be levied on foreign grown wheat."

Mr. W. LAWRENCE said he would have no objection to second the resolution if Mr. Woodward would strike out the last paragraph.

Mr. T. CADLE thought the allusion to the malt tax should also be erased.

Mr. D. LONG complained of the injury done by foreign competition, but attributed the depression mainly to the diminution of labour and consequent high price of it caused by the Education Act. He believed the landowners would greatly suffer in the long run.

Mr. CHANCE defended free trade principles, and after a discussion, in which the PRESIDENT, Mr. T. MORRIS, Mr. B. ST. JOHN ACKERS, and others took part, Mr. WOODWARD withdrew his resolution, and a proposition by Mr. D. LONG that the Central Chamber should be asked to consider the causes of the depression was carried unanimously.

## LINCOLNSHIRE.

A special general meeting of the members of this Chamber was held at Lincoln one day recently, Mr. Theodore Trotter, Deputy-Chairman, presiding in the absence of the president, the Marquis of Ripon.

The first business considered by the Chamber was the action of the highway authorities for the county under the Highway Act of last year, and after the secretary (Mr. S. Upton) had read what had been done by the Lindsey and Kesteven Courts of Quarter Sessions, a resolution was carried, on the motion of Mr. Bramley, approving of the action taken by the authorities for the Parts of Lindsey to reduce to the status of ordinary highways all disburdened roads.

The Valuation of Property Bill was next discussed, and the Chamber passed resolutions affirming its opinion that the right of appeal against assessments should be to County Boards instead of to Courts of Quarter Sessions; that fresh valuations of property should be made every ten years instead of five, as provided by the measure; and that in the fourth schedule of the bill which deals with the amount of deduction on certain descriptions of property, classes 3 and 5 should be raised to 20 per cent., and classes 6 and 7 to 20 and 15 per cent.

The other Government measure discussed was the Rivers Conservancy Bill, as to which the Chamber, on the motion of Mr. Dudding, seconded by Mr. Heanley, passed a resolution appreciating and approving the introduction of so important and necessary a measure, and one likely to be so beneficial to Lincolnshire, but without pledging itself to the details of the bill.

The further consideration of the measure was then adjourned until the next meeting.

## WARWICKSHIRE.

At the last meeting of this Chamber the following resolutions were unanimously carried:—

"That this Chamber is of opinion that a tax on malt is contrary to every sound principle of taxation, for the following reasons:—

1. "The tax, being really a differential tax in favour of the finest barley, tends to prevent the farmer pursuing a proper course of husbandry in the rotation of crops. He is also discouraged from using malt as a condiment in the rearing and fattening of stock.
2. "The tax tends to foster monopoly in the malting and

brewing trades, the large capitalist being unduly favoured in consequence of the early stage in the manufacture at which the tax is levied.

3. "A powerful inducement is offered for the substitution of fraudulent and deleterious compounds in lieu of malt in the brewing of beer, which probably accounts for the worst cases of intoxication.
4. "The tax being paid so far from the point of consumption of the finished product, beer, becomes cumulative. Large sums of money are thus taken in consequence of the tax from the consumer which never reach the Exchequer.

"The Chamber therefore consider that the malt tax ought to be repealed, and that a tax on beer of sufficiently large amount to prevent possible loss to the revenue, might be imposed in lieu thereof."

It was resolved that the next special general meeting of the County Chamber be held in the city of Coventry on Friday, May 5th.

Mr. BUCKMASTER, of the Science and Art Department, South Kensington, then delivered an interesting lecture on "Instruction in the principles of agriculture."

## SWINDON SHORTHORN SHOW AND SALE.

The second annual sale and exhibition of Shorthorn cattle took place on Wednesday, April 2, the Horse and Carriage Repository, when prizes of the value of upwards of £100 were given by Messrs. Deacon and Liddiard, the proprietors. The entries in all seven classes were numerous.

### PRIZE LIST.

Class 1.—For the best Shorthorn cow or heifer, in calf or milk, exceeding three years—1, Mr. H. P. Baxter, Southall, Middlesex; 2, Mr. D. Arkell, Lechlade.

Class 2.—For the best Shorthorn Heifer, not exceeding three years—1, Mr. C. Hobbs, Maisey, Hampton, Fairfield; 2, Mr. H. Bettridge, East Wantage.

Class 3.—For the best Shorthorn bull, exceeding two years—1, Mr. T. Hewer, Inglesham, Lechlade; 2, Mr. J. Stratton, Alton Priors, Marlborough.

Class 4.—For the best Shorthorn bull, exceeding twelve months and not exceeding two years—1, Mr. F. Dodd, Wallingford; 2, Mr. T. Hewer, Inglesham, Lechlade.

Class 5.—For the best Shorthorn bull, exceeding one year and not exceeding fifteen months—1, Mr. J. Gay, Attwater, Britford, Salisbury; 2, Mr. J. H. Dunn, Gillingham, Dorset.

Class 6.—For the best Shorthorn bull, not exceeding one year—1, Mr. J. Gay, Attwater, Britford, Salisbury; 2, Mrs. Nace, Sherborne, Northleach.

Class 7.—For the best bull of any breed, under eighteen months old—Prize, W. Arkell, Hatherop, Fairfield.

## THE TITHE RENT-CHARGE.

A Parson writes to the *Times*:—

Your correspondent Mr. T. C. Scott mentions as one of the troubles under which farmers are now suffering (and that they are many I most willingly admit) that the tithe rent-charge paid in lieu of £100 has during the last three years been considerably higher than that sum. This was also mentioned as a grievance in the House of Commons on Tuesday. Will you kindly allow me to ask whether it was considered a grievance by the payers of tithe rent-charge that during the years 1854-5-6 they paid only in the respective years £91 13s. 5½d., £90 19s. 5½d., £89 15s. 9d.; or, again, when they paid in the years 1865-6-7 £98 15s. 10½d., £97 7s. 9½d., £98 13d. 3½d., respectively? My memory is pretty good, but I do not remember having read of any instance in which the tithe rent-charge was made up to £100 under a sense of wrong done to the parson. I can say positively that no tithe payer in my parish volunteered to do so.

The present value of tithe rent-charge, taken on seven years' average, seems to betoken that there has been some advantage to corn-growers during those years.



## THE HYPOTHEC ABOLITION BILL.

The following is a copy of the Hypothec Abolition Bill as amended in Committee of the House of Commons, and it is followed by a letter from Mr. Barclay, M.P., fully explaining its meaning :—

"Be it enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows :

"1. From and after the eleventh day of November, one thousand eight hundred and eighty (hereinafter called the commencement of this Act), the landlord's right of hypothec for the rent of land, including the rent of any buildings thereon, exceeding two acres in extent, let for agriculture or pasture shall cease and determine : Provided that nothing herein contained shall apply to any claim for rent due or which may become due under any lease, writing, or bargain current at the date of the commencement of this Act, and payable at any term of payment thereafter.

"2. From and after the commencement of this Act the landlord of any land exceeding two acres in extent, and let for agriculture or pasture, shall, subject to the provisions of the preceding section of this Act, have the same rights and remedies against his tenant when six months rent is due and unpaid as is now provided by the law of Scotland when twelve months rent is due and unpaid, and shall also have the same rights and remedies against his tenant when twelve months rent is due and unpaid as is now provided by the law of Scotland when two years rent is due and unpaid, but subject always to the provision following, that is to say : It shall not be lawful for the sheriff in any proceedings under the Act of Sederunt of the fourteenth day of December, one thousand seven hundred and fifty-six, to decern the tenant to find caution for any sum exceeding the arrears of rent due and the rent for two crops following, or during the currency of the lease if the lease is of shorter endurance than two years.

"3. The provisions of the second section of this Act shall not apply in any case in which the landlord's right of hypothec has not ceased and determined."

## TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—The results which, according to my understanding of the law, will proceed from the Hypothec Abolition Bill as it now stands, are so extraordinary that I beg you will allow me to call public attention to them.

The first clause of the Bill abolishes hypothec, but provides that this abolition shall not affect leases now existing, or which may be entered into before November, 1880. The injustice to the tenant's general creditors and the injury to his credit will thus continue to a greater or less extent for about twenty years. The new state of matters, however, proposed by the Bill seems to me worse than the present.

According to the Act of Sederunt of 1756 "anent removings": "Where a tenant shall run in arrear one full year's rent . . . it shall be lawful to the heritor or other setter of the land to bring his action against the tenant before the judge ordinary, who is hereby empowered and required to decern and ordain the tenant to find caution for the arrears, and for payment of the rent for the five crops following (or during the currency of the tack, if the tack is of shorter duration than five years), within a certain time, to be limited by the judge; and failing thereof to decern the tenant summarily to remove, and to eject him in the same manner as if the tack were determined."

Further, according to existing law, a tenant who is in arrear for two years' rent can be ejected by the landlord, no defence being competent to the tenant.

Under the Hypothec Abolition Bill, as amended in Committee, the landlord, in respect of leases granted after November, 1880, is to have the remedy provided by the Act of Sederunt, of 1756, when six months' (instead of twelve months) rent is due and unpaid; but the security

to be required of the tenant is limited to two years' rent instead of five. Then, under the law other than the Act of Sederunt of 1756, the landlord is to have power to eject the tenant when one year's rent is due and unpaid, instead of two years'.

Let us see how the law will work. A half year's rent is due by a tenant, say, on the 1st February, and remains unpaid (I will not take an extreme case, and say on day), but, say, till 15th May; then the landlord will have the power on 15th May to summon the tenant to appear before the sheriff in, say, five days (on 20th May) to give satisfactory security for the rent due, and for two years' rent to come. The sheriff will have no alternative, as I understand, but to order the security to be given within, say, ten days (by 1st June). If the security is not forthcoming as ordered, the sheriff must grant warrant for the tenant's ejectment forthwith, and the tenant must go, leaving all growing crops, grain, turnips, potatoes, and grass, to the landlord, who, according to my understanding of the law, is entitled to appropriate these crops, without paying a farthing to the tenant or to the tenant's creditors, even though the value of the crops appropriated may largely exceed all his possible claims. If a tenant is even a day in arrear with his half-yearly rent the landlord will have the power to enforce security, and if the tenant can provide it the landlord is kept safe. If the security be not provided the landlord can keep himself safe and probably make a profit by appropriating the whole of the crops on the farm not separated from the soil. Proceedings of course may be adjusted to a season of the year when the value of the crops in the soil will meet the landlord's claims.

If these views of the law are wrong, the error will doubtless be pointed out; but if they are right will not the new law prove more flagrantly unjust and oppressive than the present, and instead of improving the position of the farmer in any respect will it not be worse?

I am, Sir, &c.,

JAMES W. BARCLAY.

*Reform Club, April 3rd, 1879.*

## THE PROPOSED LAND CONFERENCE

## TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—The interest excited by the grave condition of agriculture, the terrible evils which an unjust land system has long inflicted, the immense power of the English farming classes to enforce a reform of agricultural relations, coupled with their marvellous neglect to protect themselves, their country, and their oppressed fellows engaged in the same all-important industry and occupation, these and similar reasons lead me to invoke your well known fairness and public spirit for permission to address a few observations to your wide circle of readers. The depressed and suffering state of agriculture is the great domestic topic of the day. Mere politicians and office-holders may take a more noisy interest in foreign adventures and continental intrigues. The permanent interests of these kingdoms is based upon the prosperity of the cultivating and producing community, and that prosperity is not only checked, but retrograding, while the slightest essay to provoke a moderate improvement is scouted from the legislature, scandalous to relate, by an overwhelming majority of representatives of the British tenantry themselves. What other country of the world presents an enigma so absurd and so humiliating?

I have some special right as an Irish national representative to address the English farmers. I serve my Irish country, but they speak foul falsehood who say I wish ill to the English people. And yet that very section of the English people whose own interests should bind them to the cause of good government in Ireland, are at

once the main supporters of the party which maintains the worst abuses of Irish legislation, and at the same time, for thanks for all their pains, are the poor dupes of the oligarchy, which would be simply nothing without them. Who are the most virulent opponents of every Irish reform? The English county members. Who refuse every measure of justice and equality to the Irish people? The English county members. Who continually excite discontent and disaffection in Ireland by their stolid hostility to every popular demand, and then have nothing to suggest but a coercion act to meet the trouble they have raised? The English county members. But while sowing discontent and disaffection in the empire, how do those representatives of the English county constituencies behave towards their own electors? Who pass sham Agricultural Holdings Acts? Who insist upon quartering their ground game upon the hard-earned crops of the English farmers? Who oppose county government reform? Who spend at their own sweat will the taxes and monies of the ratepayers of the county? Whose spokesmen and advocates ridicule the pretensions of the farmers to ape the manners of their betters? Who insolently suggest that, instead of complaining of the restrictions on agriculture, and petitioning for a diminution of burthens, the English farmers would do better to give up educating their daughters "as ladies" and bringing up their sons "above their station?"

Surely there was never such an anomaly as this, that the vast class, the pillar and foundation of the State, should allow all this, when a single act of united resolution, with hardly a conflict, would change it all, and at the one stroke place landlords and farmers throughout the three kingdoms on conditions of mutual right and self-respect instead of the present one-sided privilege and oppression which are so fundamentally injurious both to the cultivators and the whole community.

It is industriously circulated that the interests of Irish and British farmers do not exactly coincide. But is this a reason for refusing co-operation so far as common benefits can be obtained by common action? Of course, there may be national and local peculiarities which require to be treated apart. Thus, the ground game nuisance, so destructive in England, excites small notice in Ireland. But ought the sixty Irish members representing Irish agricultural interests to oppose the redress of the English game grievance, merely because it is not in this particular respect that the shoe pinches the Irish agriculturist most severely? On the other hand, by the adoption of the principle of a rational co-operation, the nucleus of a powerful Tenant-Right party is at once secured in the Imperial Parliament. Sixty Irish tenant righters, some thirty Scotch, and perhaps fifty English—the latter principally consisting of the representatives of our town popular constituencies—here are no less than 140 land reformers who would quickly rise to be the majority of the House as soon as the English farmers had done their part of the common programme in the English counties. Farmers of England, I would tell you a story of a famous set of questions and answers which worked a wondrous change in a country not very distant from your own. There was a time in France when the popular forces were despised, because the people did not know their own strength. In those days, a courageous reformer set forth the situation in the following words: "Who are the people? Everybody, except the privileged classes. What are the people? Nothing. What ought they to be? Everything."

Farmers of England, you have but to know yourselves. You allow yourselves to be treated as nothing, while it entirely depends on yourselves to become, there is no power on earth to prevent your becoming everything—at least, so far as your own legitimate interests are concerned. If Irish land reformers are too thorough, if Scotch ones are too limited in their views, why not have a great Land Conference where all agricultural interests can be consulted in common, and where a fair and just medium may be struck for the guidance and co-operation of all? The landlords cannot justly object to your union. The English farmers have always been conspicuous for their regard for every real or apparent right of the landlord.

Lord Beaconsfield hints at the future bearings of the International Currency Question as suggesting an improved condition of British agriculture. I fancy even that remarkable statesman never imagined a more mysterious remedy for a plain and pressing necessity. I do not see anything like it in the replies collected by Mr. Samuelson with such good effect from all parts of the kingdom. The farmers of England speak of much more intelligible matter-of-fact reforms. "Alter the Law of Entail," and "abolish Game Laws," "abolish Law of Distraint." We want "Security of Tenure," "give more security for capital," "abolish Tithes," "Local Taxation Reform," "tenants should be paid for Game Damage," "outgoing tenants should be paid for unexhausted improvements," "freedom of cultivation and sale and lower rents," "abolish all covenants which restrict freedom of tenant in developing the resources of the soil," "give greater freedom of cultivation and sale," "security of tenure, and hares and rabbits to tenants," "arbitration to settle rents," "freedom of cultivation and compensation for improvements," "all land produces most where there is a liberal Tenant-Right."

There, my Lord Beaconsfield, is what the English farmers think of your mysterious speculations on International Currency and the influence of silver spoons on the rate of exchange. If the tenants were only half as united in action as in the sense of their overwhelming grievances, I fancy that Lord Beaconsfield would come down from International Silver Spoons and recognise that the agricultural interest is no longer to be duped with fine Abracadabras that mean nothing but a most palpable and, I am happy to say, most unsuccessful effort to throw dust in the eyes of the county electors. The agricultural interest believes no longer in Whig or Tory. When the agricultural interest once comes to believe in itself, and to practice the co-operation which is alone wanting for the exercise of its irresistible power, a new era will have opened for the cultivators of Great Britain and Ireland.

I am, Sir, &c.,

FRANK HUGH O'DONNELL.

*House of Commons, April 3.*

P.S.—A further proof of the determination of the present Government to shelve the farmers' grievances was supplied to-night, when the Chancellor of the Exchequer declined to make any reply to a question inquiring when the discussion on the Agricultural Depression throughout the country, the adjournment of which he had carried on Tuesday week, would be continued. Turkey, Afghanistan, and South Africa—there is room or everything all over the world, but there is no place or the farmers, if they do not make their own opportunity.

## THE LAW OF DISTRESS.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—I make no disguise of my political principles. I am what has been called a Philosophical Radical. I hate political as heartily as I despise religious creed-mongering. When the Liberals are in the wrong, I won't "march through Coventry with them." Why will Conservatives allow themselves to

"Be as tenderly led by the nose as asses are?"

Look at the work of their Head Centre! Household Suffrage in the boroughs; repeal of the Combination laws; legalizing trades union conspiracies; authorizing pickets; suppressing the legal maxim against restraint of trade; giving compensation out of an employer's pocket for injury done by one servant to another, so that a ploughman wounded by a pitchfork or the kick of an unbridled horse, will, with his family, have to be kept by the farmer—and here at least Beaconsfield offers up Hypothec to the clamour of popularity.

A crew of insolvent debtors formed themselves into a club the first rule of which "Resolved that all creditors are d—d scoundrels." Is not that the sort of spirit which dictates the agitation against the Law of Distress? What honest man that means to be as good as his word—not to say his bond—has any just interest against this law? Where is the hardship of a tenant being made to pay his debts? Is there any injustice in giving his creditor an easy, expeditious, inexpensive means of securing an acknowledged debt, in a manner as strictly prescribed by law as any legal process whatever? The slightest deviation from the most precise procedure—which, by the way, is conducted by public sworn officers—is perpetrated under the heaviest penalties of civil damage. The tenant may always relieve himself from an illegal distress by replever. The landlord, from the very fact of ownership, is perfectly responsible to make good any flaw in the process of his levy. What motive that is honest can raise exception to such a dispensation?

The force of this agitation is that subjection to the pretended grievance is purely voluntary. No tenant need undergo the operation of the law unless he pleases. He may perfectly well stipulate as a condition of his lease that he shall not be subject to distress, except by the decree of a court of law. If he does not bargain for exemption, where or how is he wronged? Nothing but the grossest ignorance can regard the law as even exceptional in principle. Mortgage deeds generally contain covenants for similar powers of entry. Bills of exchange give facilities and privileges to the drawer not competent to creditors on open account. If the law were repealed, it would still be open to lessor and lessee to covenant themselves into it again. Pawnbrokers, carriers, holders of bills of sale, wharfingers, warehouse keepers, ship-owners, inn-keepers, livery stable keepers in their rights of lien, all have the same powers without legal process.

On whom is this law a hardship? Go through the Jeremiad of Captain Delf, and little—indeed, nothing, will be found of any suggestion of hardship to the tenant himself. Imprisonment for debt—that most useful check upon rogues or spendthrifts—being abolished, what recourse is there against the purse but distress, seeing there is no longer any against the skin? Is it a hardship either to debtor or creditor that the delay and expense of legal process are saved? It is the thief, not the decent citizen, who dislikes the police.

Here might the examination stop in so far as an agricultural journal is concerned. The tenant being disposed of, the exoteric world might be left to its own reflections. But let the subject once for all be exhausted. The law being known to everybody, a stranger putting his stock into another man's field has only to take the precaution

to get exhibition of the receipt for the last half-year's rent; the purchaser of growing crops may refuse to pay for them until he sees the landlord has been satisfied. It is as utterly untrue that steam ploughs and thrashing machines hired by the day are liable to distress as the brewer's dray or the baker's cart. The purchaser of stock from a tenant need simply not pay until he has got delivery. Cattle *in transitu* put into a field by a drover without the consent of the owner would not be liable to distress any more than if they strayed there. As to all the trash about a confiding creditor being postponed unwittingly to the landlord, every creditor knows beforehand of the landlord's priority, and may either refuse to give credit, or see that the current rent is paid. But if the argument be good for anything, why does it not call all creditors to be placed on an equality? The tenant may agree to give the baker ready money and to take twelve months' credit from the butcher. He may grant a bill at sight to the manure merchant, and keep the saddle on an open account. He may grant a collusive bill of sale and cheat everybody. Every one of these may thus steal a march on the other, and nobody be the wiser. Nay, the "confiding creditor" the day before the first year's rent falls due may come in and sweep off the entire crop and stock, even to the very seed corn and manure for the next year's crop.

It is really a novel position that a landlord is not to let his land to a tenant of limited means because it would give him an "illusory position," forsooth, in the eyes of the grocer or linen draper!—as if these "Israelites without guile" were "weazels asleep"—were "confiding creditors." If landlords can "secure themselves against losses by judicious choice of tenants," "confiding creditors" can have "exceptional advantages" in a "judicious choice of debtors." It requires some command of face to urge such pleas, and much command of patience to answer them.

The law of distress for rent has a very clear *raison d'être*. The tenant cannot be expected to pay his rent until he turns his crop into money, and credit is therefore a reasonable necessity of the relative position of the parties. It is important for the business of agriculture that the proceeds of crops and stock should be at the command of the tenant, to carry on improvements. It is the high-conditioned farm that yields the crop and fats the stock. Is it reasonable or fair that the owner of the very instrument that yields all the property—nay, not merely the instrument, but the substance and material—should see it borne off by a stranger, or be cheated by a fraudulent tenant? What man of moderate means, under such a state of the law, could a landlord trust? Who would have any chance to rent land but men of wealth? Who could rise by skill, industry, and self-denial, but slender present resources if he could not offer the security of this law of distress. The plain truth is, the cry against it is the rich man's, to get land at his own price, and to crowd the smaller man out of the field.

But is this all? What do you think of the tailor seizing the seed corn just when it should go into the drill, or the shoemaker selling the very dung-heap, or carrying off a plough horse for a pair of boots, leaving its mate idle, while land cries aloud for tillage? The cunning bailiff would just seize the most critical catch of the hay harvest to detain the waggon, and let the crop go to ruin—and the whole cereal crops might be irretrievably lost, to the utter destruction of the farmer, by some temporary seizure of the mowing machine, or in a dairy farm by detaining the cows, and so ruining his custom and his milk walk, besides throwing the whole of a fertile farm out of crop for the season. The farmers, like no other trade, depend not only on seasons, but on cycles of them. We have had three years, perhaps four, utterly profitless.

The tenant hopes to more than balance the lean kine with the fat, if time be given. Who does not know wealthy farmers who will tell you they did not get back the seed the first year of their lease, and not much the second? If "confiding creditors" were not kept in check by the preferential rights of the landlord, the husbandman might be sold up in the first six months, after perhaps a great outlay in prospect of the future. It is the clear interest of the landlord to give him time to turn round—but of whom else?

Observe—The farmer must watch the seasons, the months, the very days. A shower may make hundreds of pounds of difference to him, or failure to take advantage of a shower. "*Res rustica sicut, si unam rem sero feceris, omnia opera sero facies.*" Interrupted in hay time, in harvest time, in root ploughing or gathering, in the critical operations of the field—by an execution, the effect may be ruinous; and to extort a debt of ten pounds, such seizures may be made as may hinder the saving of a hundred. It is to the advantage of the landlord, of the land, of the tenant, of the labourer, to leave the tiller free to go about his work. Each of these would only injure himself by embarrassing the cultivator at the critical periods of his extremity; but an outside execution creditor would get his money all the more readily, the greater the straits to which he put his debtor.

Another consideration of equal importance is peculiar to the business of the farmer. Markets are fickle. Corn, cattle, sheep, pigs—force a farmer to sell these without reference to time and season, and he may have to part with them for less than half their value. Give him time to watch prices, which the landlord alone has an interest to do, and he may save cent. per cent. An ordinary creditor may compel the tenant to occupy his hands in thrashing just when other critical operations require to be executed.

Is it for the interest of agriculture—of society at large—that "small men" should be cut off from all chance of rising? My experience is that the men who hold their own plough, and work their fields by themselves and their families, are able to pay higher rents, and are more punctual in the paying of them than their larger aced neighbours. I can cite a "cloud of witnesses" to this effect. I do not say this of every peasant who turns farmer, but I do say it of every man of self conduct who is capable of being his own master. Give such men time, the security which the law of distress enables them to offer to the landowner, and the credit which it renders it practicable for the latter to grant, and the foundation will be laid for the rising fortune of many a useful citizen. The "homestead law" of America and some of our colonies is based on this principle. Is the landlord's the only right of distress? What is the parson's remedy when tithes remain unpaid?—the rate collector's?—the land-tax collector's? These all have priority.

It is absolutely whimsical to find it urged that if the rights of distress were removed, the landlord would give reasonable time like other creditors to the debtor. Why that is just the advantage the law of distress enables the owner to extend to his tenant—nay, more, it is what empowers him to beat off the aggression of other exacting claimants. In truth, Captain Delf betrays the whole secret of this clamour, when he suggests that if the owner demanded payment in advance, or security in lieu of the right of distress, he would have his estate thrown on his hands, and rent would be reduced 7s. per acre. That is just the object of the wealthy agriculturist, who *can* pay in advance, or find security. He looks thereby to drive every person of moderate means out of the market, and make with the freeholder just what terms he pleases. That in this he would find himself mistaken is not difficult to see. The real effect would be

to abolish tenancy altogether, convert all landowners into cultivators, and leave only the owner and the labourer, as in the worst times of Rome, when the empire fell to ruin and huge estates were tilled by slaves. Of all traders the farmer, as a rule, has the least reason to complain of a law of prompt payments. He is the most peremptory of creditors, and the laxest debtor. He has a perpetual law of distress in his own hands, customers for more than double of what he can produce at his own door, and his wares, the indispensable and daily wanted pressing necessities of life. I remember, in the days of the sliding scale being in a grocer's shop in Boston on market day. A farmer came in and brusquely required payment for 20 sacks of potatoes, which he received. As he left the grocer muttered "He only delivered 'em last week, and his outstanding account to me for ten times the amount for groceries is going on for two years old."

I cannot think this question has hitherto been viewed from its proper stand-point. The relations of landlord and tenant are like those of no other debtor and creditor. They are not those of single transactions, but of a large portion of each of their lives. Do you ever hear of the saddler throwing 20 per cent. off his bill, because of a bad season; or the wheelwright adding a new cart-shed to the buildings to keep wagons from the weather? It is infinitely for the interest of the freeholder that the occupier should be prosperous, changes of tenancy being always injurious to one who has to look out for a new renter. An ordinary creditor if he loses one customer, has only to find another. As a rule the shop keeper, manure merchant, or other retailer, cannot afford to lie out of his money, especially when he has no security for his debt, and must proceed at once to recover it. But the landowner, as a rule, is not so pressed for money as to require immediate liquidation. From the very nature of his trade the farmer cannot rely upon punctuality in meeting his engagements. How often are we told, and with perfect truth, that the tenant does not look for a return in the earlier years of his lease, and that he only looks to reap the fruits of his outlay and toil as the years roll on. In the case of the many farms that are run out, are foul with weeds, that have been stained by scourging crops, or left undrained and unditched, perhaps with fences, gates, buildings, neglected and ruinous, it is only time that can restore fertility, or bring back order and profit. It is eminently the interest, perhaps it is the express covenant of the owner that he should give his tenant time to do that which is not merely a benefit to the farmer, but to his labourers, and to the country, which has a very clear interest in the fertility of its land. As the law stands, the landlord can give, not only time to the farmer to turn himself about and to reap what he has sown, but he can beat off others who have an interest adverse to both, and who cannot afford to wait unless they are compelled to do so by the law itself. Farming is like nothing else. In spite of every care, and the most prudent foresight, the very first season of a lease may see its entire labours swept away—a ruinous spring, Saint Swithin weeping upon the harvest his retributive tears, the murrain sweeping off the sheep, or pleuro-pneumonia the cattle. These are vicissitudes as certain as they are singular—confined to the trade of bread and meat raising, and the man who suffers them is absolutely at the mercy, for the time, of a quite subordinate creditor, who may seize seed corn, horses, wagons, the plough just when the field should be turned up, the cart when the hay should be saved from the shower, the team when the wheat should be carried, else the whole labours of the year will be lost. If not for himself, yet for the tenant, for the labourers, practically adicted to his glebe, for the due culture of the soil, and mixture of its herds, it is desirable that the farmer in the extremity into which the vicissitudes of the

seasons will sometimes hedge him, should have some protection against the incursions of exterior creditors, whose processes may frustrate the whole labours of the year in the recovery of a comparatively trifling liability. Of every ordinary creditor the debt is exigible the moment delivery is completed, that of the landowner is not payable until at least six months after possession is handed over. Forbearance, considerate indulgence is his interest. Prompt action that of every other claimant.

The element of time enters into the business of the farmer, not merely as regards seasons and cycles, but in respect of his commodity and market prices; and time is but another name for the principle on which the law of distress is founded. In my own time, I have known wheat within a month vary in price from 40 to 80s. Go through a homestead. You may see hay ricks five years old, wheat stacks standing till the rats have eaten the heart out of them. Force a sale of pigs, of sheep, of cattle. They may be literally thrown away. Let the tenant "bide his time," hold off until "prices stiffen," and he may make quite cent. per cent. of his produce. The longer he holds out of the market the better is the security of the landlord. While the ricks or the stack are on the farm he is secure. When the tenant gets his doubled price his rent is certain. Are not these considerations the wise interpolation of the provision of the law that the landlords security shall extend over six years. An outside creditor having no security would drive the tenant to "realise" when that was only another name for sacrificing crop or stock "for an old song." To give one who has to depend upon the caprices of season, and the fiftful lottery of speculative averages, no discretion as to when he shall hold and when he shall sell, is simply to seal his doom. What is the law of distress but an expedient for conferring on him the power of regulating his dealings by the circumstances of his trade.

That the creditor must pay the taxes, the tithe, the rent, before he can harry the tenant, practically bears him out now that imprisonment is abolished. The landlord, in giving time for his own debt, gives it for all, until the revolving year brings round its abundant harvest, and at last, there is enough for everybody.

Did not another important consideration weigh with the makers, or, at least the upholders, of this law? Give the landlord his security on stock and crop, and he can afford to leave the shelter of house, home, and offices, to the tenant, his family, his cattle and implements, and leave undisturbed in their cottages the labourers who till the farm, the wives and children who reap and glean, and form a peasantry. If an external creditor could make his swoop on the whole available property of the tenant, so that nothing remained for so much as the future culture of the holding, what would be left to the owner but ejection of the whole dwellers from the shelter of their homes.

In this connection I was not called upon to consider this law in any other aspect than as it regards farming and farmers. It is in their pretended interest that the principle is challenged; and I maintain that the clamour is that of those who desire to deliver over owners defenceless into the hands of large capitalists, who desire to drive competition out of the field. As for ordinary creditors, they perfectly well know the law, and need not unless they choose give credit to a debtor who has preferential creditors. I am not concerned to defend the extremes to which the principle may be carried. Stranger's property coming accidentally on the land, cattle grazing by agistment, and other contingencies, may require exceptional qualification. Although hard cases make bad laws, I am very willing that they should be reasonably handled, but, in my judgment the broad theory of the law is cer-

tainly not such as to justify the very confident and *de plano* tone of its opponents.

I am, Sir, &c.,

SIDNEY SMITH.

*The Manor, Folkeham, March, 1879.*

## VARIOUS NOTES.

Mr. John Thornton's forty-third Circular and Record of Shorthorn Transactions for the year 1878 is now o hand. The tables showing a summary of the auction sales during the year, and the averages realised by various tribes, &c., have already been given to the public, and commented on in this column. Mr. Thornton tells us that "the summary of sales for the year shows that a larger number of animals have been sold publicly in 1878 than in any previous year; and that the general average is in excess of the last two years, although still below the great average of 1875. Notwithstanding the assuring nature of these figures, it cannot but be admitted that there has been some decline in Shorthorn prices during the last season; and that the general average has been considerably augmented (nearly £12) by the large amounts realised at the Duke of Devonshire's and Mr. Larking's sales. . . . The great exportations made to America, Canada, and Australia in 1869-70, led to a considerable rise in prices in 1871 when trade and commerce were very good throughout the world. From 1870 to 1873 brisk business and advancing prices were the rule. . . . This condition of affairs was further developed in 1874; until production at last exceeded the requirements, and a collapse followed. The markets generally were destroyed by excessive supply. As funds increased so had speculation. The temporary increase of wealth led naturally to much occupation of land; and to an increased demand for highly-bred cattle. The American speculations in Shorthorns set in about 1871. Successful sales there led to extravagant purchases. Capital was consumed; and bills at six to twelve months were very generally introduced into the Shorthorn trade in the United States and Canada. These, in course of time, led to great recklessness; and finally nearly destroyed the market. During the year 1878 no animals whatever have been exported to North America. The prices there for pure-bred Shorthorns have fallen immensely; some of the sales for prompt cash payments, averaging as low as £11, whilst the banks have refused to negotiate bills or letters of credit. . . . The same influences which acted in America undoubtedly affected our prices here. The culminating point of prosperity was reached in 1875; when the Aylesby and Dunmore herds realised such extraordinary averages. In 1876 there was a decline in the general prices, which was continued in 1877, and still more in 1878, for the averages of the two last years have been enhanced by the extreme sums given for a few animals and not by a higher standard of prices for ordinary Shorthorns. In 1877 the prices paid for the Duchesne and Oxforde—at the Bowness, Gaddeby, and Sholebroke sales—had a material effect; whilst this year it has been the Oxforde and Wild Eyes which have so greatly swelled the general average. Nothing perhaps has shown the increase of prices of these in late years so much as the selected animals sold from the Duke of Devonshire's herd. The following table gives the average of the various auctions held at Holker:—

In the Year	Head Sold		£ s. d.
1851	... 56	including 11 bulls averaged	35 9 6
1864	... 80	" 11 bulls "	66 3 0
1871	... 43	" 19 bulls "	240 13 10
1874	... 43	" 16 bulls "	383 13 3
1878	... 30	" 12 bulls "	664 1 10

The Oxford tribe, continually increasing in demand, has been the cause of this great increase of price at Holker.

The twenty-three animals of this tribe, sold this year, have averaged £919 9s. 7d. It has been already observed that prices have fallen. It may be interesting to show wherein this fall has chiefly occurred. Good ordinary pure-bred Shorthorns have maintained the prices they made ten years ago. The great increase in prices has been for the Duchesses, Oxford, Princess, and Wild Eyes tribes. Other tribes, once fashionable, particularly the Knightley animals, have certainly declined, which no doubt is due to the increased number of animals of this and other fertile tribes: the worst bred and inferior of these in the latter part of the season were sold at the price of ordinary pure-bred Shorthorns. . . . More than one hundred animals have left the country during the year. Several have gone to the continent. A number of young bulls were purchased for Hungary. To Buenos Ayres, South America, continual shipments of bulls and heifers have been made throughout the year. The International Show held at Paris last June, has not resulted, at present, in any particular demand. A few white calves went to the south of France, near where the Charolais breed is reared. The prices asked for the English-exhibited specimens at Paris, were beyond what the French breeders were disposed to pay. Moreover, an impression prevails in France that the Shorthorn breed of late years has run much to fat; and does not now carry the weight of lean flesh which is necessary to please the meat-consumers of that country. And it must be added, in spite of the great prices given in this country and the frequent mention of what is called 'Science of breeding,' that there is still room for the enquiry, 'Whilst Science has been doing so much of late years for every other department, what has been done by her for the Shorthorn breeder?' Has a greater weight of carcase been gained in a given time? or from a fixed quantity of food? Has a larger supply of milk or butter been yielded? Are the animals hardier in constitution and more impressive to their offspring, the younger ones being superior to the old? Or have the last few years mainly witnessed an accumulation of names in a pedigree? The steadily increasing prices paid for Black Polled, Sussex, and Jersey cattle, indicate that breeders everywhere are paying more attention to animals of their own particular breeds, and that there is a steadily increasing demand for anything which is good of its kind. That there is great room for an increase in the number of cattle throughout the country is very apparent from the recent agricultural returns. Now with an increased proportion of meat-consumers among the population—both at home and abroad—there must of necessity be an increased demand for all good breeding stock in the country for some years to come. And the comparative trials among breeds do not show that the Shorthorn fails to hold its ground among its rivals. Most of the champion prizes of the year have gone to Shorthorns. It is admitted by practical men that the most remunerative system of farming in the present day, with free trade, middlemen's, railway, and other expenses, is, if possible, to breed and feed stock on the same farm. If, therefore, the Shorthorn be bred with a view to robust constitution, to great natural substance, and to good feeding and dairy properties, its prepotency and early maturity cannot fail to uphold it as the national breed of the country, and to maintain it as the safest investment for breeders."

We are happy to afford space to Mr. Thornton's remarks as above, and with many of them we thoroughly agree. If the Shorthorn be bred for actual merit and not for fashionable pedigree, then we think there can be no question as to its usefulness as an animal primarily adapted to be bred and fed on arable or mixed husbandry farms. We believe no other breed of cattle can compete with it on these conditions. Our objections are never raised against the breed, but only against the

pernicious system which "fashionable" breeders follow, and which we take to be detracting largely from the practical utility of the most adaptable and cosmopolitan of all breeds of cattle. When the mania has died out, and it has almost had its day, then we shall be prepared to see the Shorthorn breed rapidly improve; and there is nothing but the arbitrary bonds of fashion which prevents greater individual excellence in the cattle at the present time. Mr. Thornton's facts are very interesting, and his arguments exceedingly fair. The questions he asks respecting the influence of science on Shorthorn breeding are greatly to the point and deserve the careful attention of breeders. His remark, however, that the Shorthorn holds its own at comparative trials, and takes most of the champion prizes at our great shows, must be qualified a little by the fact that the preponderance of the Shorthorn interest amongst the judges is altogether unfair to other breeders. We do not, however, estimate the value of the Shorthorn from this point of view; and, believing in its great usefulness, shall be glad to see it freed from every influence that is now prejudicial to its development. The more good food-producing Shorthorns Mr. Thornton can sell at reasonable prices the better it will be for the country. There is, as he says, "no slackened interest in the breed," but merely, as we think, a slackened interest in the Shorthorn mania, if we may so describe it. The "fashion" changes according to his own account; in 1877 it was centred in Duchesses and Oxfords, and in 1878 in Oxfords and Wild Eyes; in a few years these strains of blood may be accounted no better than others which are now despised or neglected. Fashion is being narrowed down—in time it will disappear.

The American Bison is, according to the *Pall Mall Gazette*, an animal which will pay for domestication, as it produces excellent beef, having a "venison taste" about it (see "Chambers' Encyclopædia"). "One of our chief requirements," says the journal in question, "is some kind of beef as good as ordinary American beef, but distinguished by flavour or otherwise from that article, so that butchers shall not sell it for English;" and it is further suggested that the importation of this bison or buffalo beef may "serve to put an end to this nefarious practice." Clearly, nothing but common sense on the part of the public will ever put a stop to the "nefarious practice" of which the *Pall Mall Gazette* speaks; and we think common sense is decidedly against the utilisation of the bison as a domesticated animal in place—as it necessarily would be—of such breeds of cattle as the Shorthorn and the Hereford used on the native stock of the far west. But as that journal gives "a fact not before ascertained"—namely, that the bison will breed with "common cows," perhaps some of our Shorthorn breeders whose fashionable strains of blood are getting tuberculous, effete, and sterile from too much in-and-in breeding, might like to take just one cross from a domesticated bison by way of securing fresh vigour to the animals, and a venison flavour to the beef. This suggestion was not made by the *Pall Mall Gazette*, but the credit of it is entirely due to that journal.

According to the *Banffshire Journal* the polled breed have not experienced depreciation in value to the same extent as the Shorthorns, and it will be satisfactory to breeders of polled stock to find that they continue to realise higher prices at auction than is paid for Shorthorns. Last year the average price paid for each head of polled cattle was £4 5s. 6d. more than was paid for the Shorthorns sold in the same season. This year the difference is again in favour of the blackskins, the average obtained for them having risen to £7 4s. 9d. above that obtained for Shorthorns. The total number of polled cattle of all classes sold by auction was 251, and the average price realised for them, £33 2s. 6d. In 1877-78 the number of

polled cattle disposed of was 270, and their average value, £31 19s. Thus, while there is a decrease of 19 in the number sold, prices are this year on the average £1 3s. 6d. in favour of the seller. Altogether, 92 bulls were offered for sale during the past year, and realised an average of £27 8s. 5d. In the previous year the number sold was 85 bulls, for which the average price was £30 7s. 1d. With an increase of 7 animals sold, there is thus a decrease in the average of £2 8s. 7d. The average, is, however, nearly £1 higher than it was two years ago, and up to that date the increase in value had been almost continuous for a number of years. Of polled cows, 68 were sold during the year just closed, at an average of £46 11s. 2d. The number sold in the previous year was 91, and the average value £38 8s. 10d. While there is a decrease of 23 in the number, the increase in average value is as high as £8 2s. 4d. Of two-year-old polled heifers, 31 were sold during the year, being 3 fewer than in the previous season. The average price was £36 1s. 7d., being a decrease of £3 6s. 5d. upon the average price of the previous year. Of one-year-old polled heifers the number sold was 34, and the average price realised £30 19s. 7d. In the previous year the number brought under the hammer was 32, and the average realised for them £20 15s. 1d. The difference in favour of the result of this year's sales is thus an increase of two animals and of £10 4s. 6d. in the average price. Of polled heifer calves the number offered was 26, and the average paid for them £25 16s. 6d. In the previous year the number sold was £28, and the average price paid £19 6s. 2d. There is thus an increase in the average price paid this year of £6 10s. 4d.

The *Canada Globe* is of opinion that "if freight rates are reduced so that the present margin of profit is left to the shipper and the farmer, there is no reason why the trade may not resume its old rate of increase. The effect of such an increase would be to further break down the already depressed market for meat in Britain. We shall soon see then whether the asseverations of the Tory party to the effect that their late legislation was aimed not against the importation of meat but of disease are genuine. If the British farmers and their press endure with equanimity the arrival of a large cargo or two daily of American beefs, we shall know that their former protests were made in good faith. If, on the other hand, they grumble and talk about further legislation, then we shall know that it is the competition they dread, and not the disease." But the *Canada Globe* does not quite understand the position. The demand made by British farmers is that no foreign animals should be landed on our shores except stud stock under certain conditions. The Government Act does not meet that demand; and although the slaughtering of animals at the ports of landing—if it were carried out without exception—would be a decided improvement on allowing them to be sent inland, it would still be a source of danger. The farmers, therefore, and "their press," will continue to demand complete and logical legislation. As far as the importation of dead meat is concerned, farmers have never sought to restrict it, nor will they attempt to interfere with free trade in food products. Their remedy lies in a totally different direction. And it will be time enough to talk about sending us two shiploads of cattle a-day when Canada has them to send, or can purchase them in the States and ship them from her ports. When they arrive we shall complain if they are alive, but if they are dead we shall have no ground for objection, whether we like it or not.

In respect of the reported case of pleuro-pneumonia in the Union Stock Yards, the *Chicago Tribune* says that a mistake was made, and that "subsequent investigation, conducted by the Inspector of Cattle at the Stock Yards and other scientists, has proven beyond all doubt that

the first and unfortunately hasty reports were not authentic. It has been stated by those who are in authority in the field of inspection at the Stock Yards that on the 22nd of February 'a yearling heifer was found which exhibited signs of pleuro pneumonia,' and persons who cannot distinguish between a common case and one with contagious characteristics were quick to jump at the conclusion that this heifer, which was killed and subsequently examined, belonged to this latter class." But we must here point out that the actual cases which were sent here in the Ontario were again and again declared to be nothing more than ordinary pneumonia by the American and Canadian press. And therefore we are at a loss to know what importance to attach to this particular report, especially as the *New York Tribune* of March 2nd states that it took the two inspectors—Detmers and Prentice—a whole week to decide whether the case was one of contagious pleuro or not; and the *Prairie Farmer* very pertinently puts the query, "What faith can the public place in the judgment of these two cattle doctors and their future decisions in regard to the state of health of live stock" at Chicago market? The *Veterinary Journal* says that it has been well known and understood for more than thirty years "that the disease in America was positively the same as that with which we are so painfully familiar, and any one who cares to refer to the splendid and elaborate 'Report of the Commissioner of Agriculture on the Diseases of Cattle in the United States,' published at Washington in 1871, will have no reason to doubt the accuracy of our statement, or to exculpate the Privy Council for a grave error of omission or commission, which will happily be repaired on the 3rd day of the present month (March). It is more than strange that the United States Government lost sight of this report, and that they allowed their country to be declared free from infection when our Government was discussing the question as to what countries should be scheduled; and even when diseased cattle arrived in this country, that they should still plead ignorance." It is indeed more than strange; but it is true.

The *National Live Stock Journal* (Chicago) suggest that a searching inquiry be made by the United States Government as to the origin of the cargo of the Ontario. "Was it contagious pleuro-pneumonia? If so, where did it come from?" is the question asked by the *Journal*, coupled with the statement that "not a single case west of New York and Pennsylvania has ever been known." We trust that the *Journal* is correct in this statement, made, evidently, in the firm belief that such is the case. A correspondent to the *Journal*, Judge Jones, writes with equal confidence, "I have no hesitation in saying that there never has been any suspicion of the existence of such a disease in Ohio, Kentucky, or any part of the Ohio valley." But a week or so ago the *Prairie Farmer* stated that contagious pleuro-pneumonia exists now in New York, Connecticut, New Jersey, and Virginia, and that it has existed in Ohio; with an "occasional sporadic case in Indiana." The *Toronto Weekly Mail* states that the letter from the Minister of Agriculture in Canada to the United States Commissioners of Agriculture is to the effect that "the diseased cattle taken to England by the steamer Ontario were purchased in Ohio and other western parts, and taken immediately from the cattle yards in Buffalo." Here, then, is very conflicting testimony. In view of the case as it stands, namely, that contagious pleuro-pneumonia has been sent here among beasts said to have been purchased as far west as Chicago (that was the report in the first instance) we are justified in concluding that until an effective system of veterinary inspection has been instituted throughout the United



States no one really can tell where the disease is, or rather where it is not. And that being so, we entirely fail to see any possibility of the embargo being taken off the trade at present. The *Journal* very justly advocates strict scrutiny and investigation, together with adequate preventive measures wherever the disease is found. And this is a policy of sound common sense.

A correspondent to the *Kansas City Price Current* states that it is more profitable to keep sheep in Colorado for their wool only, until they die of old age, than to sell them for mutton, on account of the high rates of railway freightage obtaining in the United States.

The prizes for the Yorkshire Agricultural Society's Exhibition to be held at Leeds on the 5th, 6th, and 7th of August, exceed in value £2,100, made up as follows:—Horses 1,255, cattle 400, sheep 310, pigs 140.

The regulations for the annual show of the Highland and Agricultural Society, to be held at Perth, on the last three days of July and 1st August next, have now been published. Friday, 6th June, is fixed as the last day of entry for implements, and Friday, 18th June, for stock and all other entries. Besides the Tweddale gold medal, value £21, for the best Shorthorn in the yard, £947 is to be given as premiums for cattle, and £803 for horses, including £150 for the best stallion for agricultural purposes to serve in the district of the show.

The following births have taken place in the Prinknash Herd this year:—Jan. 6th, Lady Carew 3rd Lady Carew 4th—roan cow calf, by Lord Prinknash 2nd (38653); Jan. 24th, Lady Jane, Lady Carew 5th—red roan cow calf, by Lord Prinknash 2nd; Jan. 27th, Patience Heatherstone calved roan cow calf by K. C. B. (26492) Feb. 15th, Diadem calved roan cow calf, by Lord Prinknash 2nd (38653); March 4th, Maid of Gloucester—twin cow calves roan red and white, by K. C. B. (26492); March 12th, Alpine 2nd—roan bull calf, by King William (34358); March 14th, Lady Carew 2nd—white cow calf, by Lord Prinknash 2nd (38653).

"The days for fancy prices for store stock are practically over" says the *Melbourne Age*, and we think so too. Recent experiences both in England and Australia seem to point to the elimination of the "fancy" element altogether, unless it can be maintained on a scale of two scores instead of four, which we greatly doubt. When the super-excellent and the superlatively grand Shorthorn waders tumble down from thousands to tens, their "grandeur" will probably tumble down with them. A fortnight since we called attention to the low averages made at Messrs. Robertson's sale of Shorthorns at Colac, in Victoria, Australia, on the 3rd of January, namely £116 13s. 4d. for bulls, and £198 15s. for cows and heifers, against £792 15s. for bulls, and £1,102 10s. for cows and heifers last year. By a more recent mail we learn what the *Sydney Mail* has to say about this very remarkable sale from the most important herd of Shorthorns in Australasia. That journal moralises in the following manner:—"A few months back, when at Mr. E. B. Woodhouse's sale, first-class well-pedigreed Shorthorns were knocked down at about one-half of the rates at which Shorthorns were ruling twelve months before, we expressed astonishment. We were also surprised to see the late Mr. Ewin's herd 'go' cheap; but what shall we say regarding the late Victorian sales? Mr. Gardiner's was a failure; and the Colac animals brought prices so extraordinarily low that we must allude to the sales of past years to render the magnitude of the fall clear to our readers. In 1877 at Colac 12 Shorthorn pedigree stud bulls averaged £389 7s. 6d. per head; 7 Shorthorn pedigree heifers averaged £412 5s. 7d.; 6 Hereford stud heifers averaged £58 12s. 6d.; 88 Shorthorn station bulls averaged £49 9s.; 50 Shorthorn station heifers averaged

£78 15s.; 17 Hereford station bulls averaged £30 13s.; and 60 Hereford station heifers averaged £36 14s. The total sum realised for 190 animals was £20,200 18s. 6d. In 1878, 10 stud Shorthorn bulls averaged £792 15s.; 4 stud Shorthorn heifers averaged £1,102 10s.; 44 Shorthorn bulls averaged £44 17s. 3d.; 50 Shorthorn heifers averaged £71 18s. 6d.; 9 stud Hereford bulls averaged £66 0s. 8d.; 9 stud Hereford heifers averaged £117 9s. 4d.; 16 bulls from the pure Hereford herd averaged £28 9s. 6d.; and 258 pure Hereford cows and heifers averaged £22 13s. 5d.; and the total sum realised for 400 animals was £25,742. In 1879, 9 Shorthorn stud bulls averaged £116 13s.; seven stud heifers, £198 15s.; 71 pure Shorthorn bulls, £17 5s. 3d.; 31 heifers, £34 2s. 7d.; and 108 Hereford cows and heifers made only £688 5s. 6d. The total receipts for 228 head were £5,481 19s. 6d. It will be seen that the stud Shorthorns suffered severely this year; the bulls making less than one-sixth of the last year's average, and the heifers not doing much better. Last year, 24th Duke of Derrimut was purchased for Mr. Lomax, of this colony, for 2,450 guineas; this year, 26th Duke of Derrimut, his near relation, a champion prize taker, brought only 275 guineas. There are the same strains to-day at Colac as there were in 1876, when Mr. Gardiner paid 2,200 guineas for Roan Duchess. So it seems females, as well as males, have fallen in the market." Mr. S. Gardiner's second annual sale at Brunswick, Victoria, alluded to in the above quotation, was held on the 31st of December last, or rather that it was the day appointed for it, but, according to the *Sydney Mail*, the cattle sold so badly that it was stopped. The *Melbourne Telegraph* gives the following particulars:—"Though there were a number of the leading Shorthorn breeders present, there seemed to be a disinclination to invest, and the competition was unusually slack. A much better state of affairs might naturally have been expected, as the Brunswick herd contains some of the best blood in Victoria, and Mr. Gardiner has spared no expense in order to secure first-class sires and dams. What caused the unusual apathy that came over breeders yesterday it is hard to say, but the fact is, though many prime lots were offered, but few found buyers. The first lot brought into the ring was Brunswick's Summerton, a very handsome roan bull, by the Duke of Alvie, which, after some delay, was started at 100, and knocked down to the bid of Mr. A. R. Wallis for 210 guineas, on account of the Department of Agriculture. The next lot offered was Matilda's Double Brunswick, by the Duke of Alvie, a bull of excellent quality, for which, however, only one offer was made, and he was sold for 100 guineas to Mr. Simson, of New Zealand. The next two lots were passed, and though both showed excellent quality, not a single bid was made for them. The 8th Duke of Lancaster, a very handsome and promising youngster, calved last April, by the 14th Duke of Derrimut, was offered next, and after some very slow bidding, was knocked down to Mr. A. R. Wallis for 90 guineas. Some two or three of the remaining lots were brought forward, but as there were evidently no buyers, they were quickly passed. Only three bulls were sold, realising 400 guineas." The reason for this state of affairs is given by the *Sydney Mail* as the removal of the prohibition on the importation of stud stock; but we agree rather with that assigned to it by the *Melbourne Age*, namely, that the breeders' mania has about had its day.

In Scotland, at Perth and Aberdeen, there have been held important sales of pure-bred Shorthorns, at which 234 young bulls made an average, according to the *Barfshire Journal*, of "about £27." At the Aberdeen Joint Sale the average for 111 Shorthorn bulls was £28 3s. 8½d. At the sale in the spring of 1877 the average for 112 Shorthorn bulls was £29 15s. 1½d., and in the



autumn of 1877 that for 103 was £26 8s. 3d. At the spring sale in 1878 the average for 123 Shorthorn bulls was £29 7s. 4d., and in the autumn that for 115 Shorthorn bulls was £23 11s. 10½d. At the Perth Auction Mart, on the 12th inst., 127 pure-bred Shorthorn bulls made an average of £24 18s. 6d.; 36 cows and heifers averaged £21 4s. 11d.; the highest price realised was 66 guineas for Messrs. Christie's Royal Winsome, the winner of the third prize in the competition which preceded the sale. At the sale of pedigree Shorthorns, held on the 25th of February by the Turf Agricultural Association, 9 pure-bred Shorthorn bulls averaged £20 11s., and 3 cows and heifers averaged £20 9s.; whilst 6 yearling polled bulls averaged £24 13s. 6d. At Mr. Longmore's sale, on the 11th inst., 8 young pure-bred Shorthorn bulls averaged £20 6s. 4½d., and 8 heifers £24 13s. 6d. A summary of all the auction sales of pure-bred shorthorns in the Northern counties of Scotland for the season now closed is given by the *Banffshire Journal*, from which we take the following items:—The tables show that no fewer than 662 Shorthorns of all classes were sold, representing a value of £17,198. In the previous year the number sold was only 433, of the value of £11,983. The average for the 662 sold this year was only £25 17s. 9d., being a decrease upon the average of the former years of £1 15s. 9d. The decrease in the average this year is £7 16s. 8d., as compared with that for the year 1876-7, when the decline in value had not begun. During the three years from 1874 to 1877 the average price realised for bulls sold at the northern auctions did not vary more than half-a-crown. The fall in prices began in the autumn of 1877, and in the past two seasons the reduction has been equal to £6 13s. 7d. upon each bull sold. In the year just closed the total number of Shorthorn bulls disposed of was 391, and the average price realised for them was £25 12s. 2d., showing a decrease of £2 11s. 7d. upon the average of the previous year. In the year 1877-78 the number of bulls sold was 364, or 27 fewer than this season, the average then having been £28 8s. 9d., which was a falling off to the extent of £4 2s. from the average of the immediately preceding year. As many as 117 Shorthorn cows were brought under the hammer, and realised an average of £31 9s. 1d. In the previous year, only 27 were sold, when the average was £29 9s. 8d. Of two-year-old Shorthorn heifers, 50 were sold during the past year, and realised an average of £30 14s. 1d.; whereas, in 1877-8, only 18 were sold at an average of £24 2s. 7d. Yearling Shorthorn heifers were disposed of in the past year to the number of 80, realising an average of £19 19s. 2d. In the preceding year, when 20 were sold, the average was £22. Of heifer calves, 24 were sold during last year at an average of £13 0s. 4d.; while, in the preceding year, the average for 4 was £12 6s. 9d.

From a paper on the "Breeding of Cattle," read before the Minehead and Dunster Farmers' Club, by Mr. John Risdon, we extract the following opinions therein quoted as having been expressed by stockbreeders:—"What has given Shorthorns their very exceptional value? Not their intrinsic value (merit?) alone, but the ability of the owners to point to a long line of pedigree." . . . "Pedigree is no doubt all very well, but a long pedigree on paper is not always a good one in fact. Many of these fashionably-bred animals are notoriously bad beasts; they have in many cases been bred so long without proper judgment and from nearly related blood, that vigour and constitution seem to have been irretrievably lost. They have become ewe-necked, weasel-waisted, leggy, and consumptive; can't stand bad weather, and give little milk." We are not told whose opinions these are, but we very heartily endorse them.

The Royal Agricultural Society of Ireland has resolved to hold its show this year at Newry on the 6th, 7th, and 8th of August. At the earnest request of the local committee, presided over by Lord Newry, the executive in Dublin agreed to permit jumping competitions to be held after show hours, and in an enclosure apart from the show yard. The Lord Lieutenant will be the guest of Mr. Maxwell Close, M.P., during the show week.

It has been stated, according to a contemporary, that "an English company is to be started at Flushing for the import of American cattle, live and dead, for the German market." But why cannot the Schleswig-Holstein cattle traffic be "diverted" in reality to markets in the Fatherland? The Tonnung folks say it does not pay to send their cattle to England, and they have not been able to "divert" the trade successfully to Paris, after all that was said about it; cannot they keep their stock within the empire? Surely if Germany wants beef her protectionist proclivities would induce her to deal at home rather than import from America? We hear from time to time of cattle traffic about to spring up between America and all sorts of places, but Great Britain appears to be the only market yet found.

At a meeting of the committee of the Cavan Agricultural Society, it was determined to hold a flower, vegetable, butter, and fowl show in July, to be followed by a show of cattle, sheep, pigs, and green crops in September.

In a paper read before the Scottish Metropolitan Veterinary Medical Association on "Joint Disease in Young Stock," Mr. Robertson pointed out that whenever this disease makes an incursion on a flock, it will be found that the ewes are below par in respect of general health and constitutional vigour. And we commend the remark to the attention of our readers as being capable of very general application.

Our Canadian correspondent writes under date of March 12:—

I fear I was somewhat precipitate in expressing an opinion that this immigration policy of Sir John Macdonald's Government would be a decided reversal of that of Mr. Mackenzie. A few of the travelling agents in England have been called in, and there is some lopping off of expenditure—more nominal than real—but the estimates, out to-day, for 1879-80 show close on 180,000 dols. asked for for Dominion purposes, to which must be added the outlay of the different provinces. The fact is, in these Colonial dependencies, where Liberals and Conservatives mean only the ins and outs, and where there are no distinctive political principles, but only personal questions, patronage is the be-all and end-all of administration. And I fear the immigration leopard imposture will never change his spots, whoever may hold the reins of office. It is an instructive commentary on the present position that only a few days ago a deputation went to Ottawa to solicit official aid to enable a lot of distressed persons to go to Manitoba. They met with a flat refusal, though they suggested, sensibly enough, that the necessary funds could be found by abolishing the immigration agencies in England. It is very singular that a heavy vote should be taken to bring people here from Britain, Ireland, Russia, and elsewhere while distressed labourers on the spot cannot get a cent expended to help them to live. A great number of French immigrants brought out lately by the efforts of the Canadian Government agent and the Shipping Commission agents, are now in much distress, and the Government of France ought to take steps to stop this sort of thing. This is the second time of its occurrence. It is as well to caution the British public in good time that many choice experiments on the

eternal virescency of the home "greenhorn" may shortly be expected in connection with Manitoba and the north-west wildernesses. I shall, however, keep your readers posted on developments as they arise.

The South Ontario Farmers' Club, at their adjourned meeting on farmers' grievances, adopted the following resolution:—

"That no readjustment of the tariff will be acceptable to us which does not impose on American farmers' produce duties to the same extent they exact from Canada."

I read you a very important and startling piece of information in connection with pleuro in the Western States of America. The Ottawa correspondent of the *Toronto Globe*, writing on March 9th, affirms that one of the leading exporters of Canada declares that pleuro-pneumonia has been prevalent in the Western States since last September, and he states that the fact is well known to those in the cattle exporting business. As a consequence, the railway companies' request to the Government to raise the embargo, so far as the Western States are concerned, is opposed. In the Ontario, which vessel, it will be remembered, sailed from Portland and lost a large number of cattle from pleuro-pneumonia on the voyage, and had the survivors slaughtered at Liverpool, the whole of the cattle were, he says, from Michigan, Ohio, Indiana, and Illinois, the so-called unaffected districts, and not one from the Eastern States. It is also asserted that Prof. McEachren, the veterinary surgeon appointed by the Dominion Government to report on the outbreak of the disease in the United States, is well aware of the fact. It is clear that the dead-meat trade is the only safe and satisfactory solution of this tangled business if English herds are to be saved from the ravages of disease.

Our correspondent continues, under date March 19th:—I note an editorial paragraph in the *Express* about one William Brown, of the Guelph Agricultural College, Ontario, on which I have to say a few words. It is the trouble of such Canadian correspondents of the English press as desire to give a truthful account of matters here, and not merely reflect the official view, or make things generally pleasant, that they have continually to be "defining their position." Mr. Brown, of whom, without wishing to be discourteous, I may say that his name is nearly unknown outside his own circle, and carries no special weight there or elsewhere, is pleased to impute "venom" to me as your correspondent. This is a misstatement, whether intentional or otherwise I know not. I have no animus against this country, in whole or part. It is the discreditable habit of the professional immigration promoters, when their one-sided or fictitious presentments are corrected, to resort to abuse or imputation of motives. But, I repeat, the charge of ill-will to this country is a fiction in my case. Nearly all my living relatives are here, and, for good or ill, my own fortunes and those of my family are bound up with the destiny of Canada. But while I wish this country well I wish England well too, decidedly; and it is on behalf of my countrymen at home I desire, at many sacrifices of my own ease and material prosperity, to present facts to the British public where interested persons or cliques present fictions, or accounts so one-sided that they are as bad as fictions. I have known this colony many years, and have made it my special business to investigate studiously all its aspects as a field for British immigrants; and I have found that the introduction of English capital and labour is attended with so many advantages to certain interests that they have organised an elaborate and costly machinery of misrepresentation to promote it. The truth is carefully and persistently disguised, and hence thousands of Englishmen have long been the victims of terrible sufferings and disappointments. At this very hour

schemes are incubating for enticing out crowds of Englishmen of all classes—agriculturists specially—to the pathless wildernesses of the inhospitable north-western provinces of Canada. And why? In order that land-sharks may make their "pile," careless of the sufferings of their dupes, and because, in the struggle of political factions for the loaves and fishes, this country is hopelessly committed to the wild and raking known as the Pacific Railway Scheme, for which there is neither population nor trade, and none to be looked for, unless these can be got by luring these unknowing emigrants from Europe by hook or crook. To this end England is being flooded with delusive *ex parte* handbooks (notably one called "Dowse's Guide"), in which every drawback is studiously kept out of sight; and thus the notions of the unhappy emigrants respecting the wildernesses to which they are bound are on a par with those by which Richard Whittington was induced to pay his first visit to the metropolis. I say that Manitoba is already a complete nest of land-sharks who have whipped off the cream of the country, and these gentry are now extending their operations to the Saskatchewan and other districts. English emigrants who take emigration literature for gospel will have their eyes rudely opened ere they have been twelve months in that fearful wilderness. The mosquito and other "fly" pests alone are enough to make life nearly unendurable.

If the professional immigration promoters don't like my version of facts, let them give their own in your columns, and I will attend to them. Mr. Brown, I see, offers to prove that Canada is a fine field for English farmers "with £2,000." I don't think he was a prodigious success as an emigrant farmer when he tried his hand in the County of Simcoe here eight years ago. Any way, he soon forsook the *role* of Cincinnati, and turned to land-surveying and other pursuits of a softer nature. As you will see by an amusing letter I enclose from the Government organ, he comes out with a *beau ideal* of a special Immigration Delegate who, he thinks, ought to be despatched to Britain to enlighten the stolid intellect of the down-trodden English farmer about emigration to Canada. The acquisitions and endowments of this interesting immigration mentor are set forth with suchunction that, after Rasselas, we are about to cry, "Enough! thou hast convinced me no man can be a special commissioner to the British farmer," when suddenly it flashes on us that W. B. himself is the wondrous being, though his well-known modesty militated against his expressly mentioning it. I do not think, whatever the Ontario Government may have done, Mr. Pope, the Dominion Immigration Minister, will be captured by Mr. Brown's ingenious ensnarements.

A very singular statement is circulating in the Canadian papers, viz., that some German cattle buyers have just come to Toronto to purchase cattle for export to Germany. We have also the intimation by cable that a company is being organised in Germany to promote the exportation of American cattle to that country. The *Toronto Telegram* observes on this:—"This is carrying coals to Newcastle with a vengeance." Indeed, the thing seems inexplicable, except under the surmise that it is the first of sundry ingenious schemes on the tapis for introducing American cattle into Britain by circuitous routes.

We have recently referred in this column to a contagious disease of animals, reported to exist in the United States, which from its description might be supposed to be foot-and-mouth disease. We have since noticed in a Canadian paper, the *Farmers' Advocate*, the following allusion to the disease as existing in the United States:—"In previous issues we have spoken of Texan cattle fever, pleuro-pneumonia, hog cholera, trichinae in pork,

and foot-and-mouth disease. We feel satisfied that the voice of every real Canadian farmer will support us in asking our Government to use every proper means to prevent the spread of any of these diseases in any part of this Dominion." And on referring to the preceding number of that journal we find editorial remarks to this effect:—"If we had our way we would not allow another horn or hoof of cattle or swine to be admitted into Canada from the States, under any pretext, until the diseases be entirely stamped out in that country—pleuropneumonia, foot-and-mouth disease, trichinae, and cholera." What a relief it would be to know on trustworthy official authority just what contagious diseases of animals exist in the United States and Canada, and to what extent. The absence of any such official statements we are completely at a loss to know what value to attach to any of the newspaper reports even when given in the strictest good faith.

Germany has been officially declared free from cattle plague, after several months' continuance of the disease which was first detected in Stallupöhnen, on the Russian frontier. The introduction of cattle plague was clearly traced to the smuggling of cattle across the frontier, the great difference in the value of the animals in Prussia, as compared with their value in Russia, constituting a strong temptation to the smugglers, who incur a risk of severe punishment, from a few months to several years of penal servitude. The German Government intend prohibiting the importation and transport of living cattle through the empire.

In consequence of the appearance of cattle plague in Bohemia, the importation of Austrian cattle into France is prohibited.

The *London Gazette* of the 8th ult. announces that at the Council Chamber, Whitehall, the Lords of her Majesty's Privy Council revoked their order, bearing date February 28, 1879, defuing a part of the port of Liverpool, in the county of Chester, as a foreign animals wharf, and substituted the part of the port of Liverpool, in the county of Chester, as a foreign animals wharf included within that space at the Wallacey Dock, in the borough of Birkenhead, and the township of Pooltoncum-Seacombe, situate on the east and north-east sides of the said dock.

In consequence of the Longhill Farm having been disposed of, Mr. W. F. Marshall, the well-known breeder of Lincoln sheep, submitted to public competition the whole of his flock of breeding ewes. The highest price for a pen of five, £8 5s. each, was given by Mr. Sharpe, Baumber, who secured another pen at £7 2s. 6d. Mr. Smith, Cropwell Butler, bought one pen at £7 15s., and another at £7 2s. 6d.; Mr. Snodin, Stonesby, a pen at £7 10s.; Mr. C. S. Dickinson, Lincoln, pens at £7 5s. and £7; Mr. Harrison, a pen at £7 2s. 6d.; and Mr. R. G. F. Howard a pen at £7 each. Mr. Marshall has retained the whole of his ram and ewe tegs, and does not intend to relinquish ram-breeding.

The collective sale of pure-bred Shorthorns from the herds of the late Sir W. C. Trevelyan, Sir J. Swinburne, Sir W. G. Armstrong, Mr. T. Gow, and Mr. R. Harrett, conducted by Mr. John Thornton at Dringhous, York, realised an average of £38 11s. 5d. for 70 animals; 40 cows and heifers averaged £35 5s. 10d., and 30 bulls averaged £42 18s. 10d. The averages of the selections from the several herds were given last week in another column.

The well-known prize hunters, Tavistock, the champion prize-winner at Islington and Alexandra Park, and first-prize weight-carrier at the Great Yorkshire Show; Rosington, a first at Manchester, Alexandra Park, and

Islington; and Nobleman, the first-prize hack at Bath and West of England 1877, and first lady's horse at Manchester and Alexandra Park 1878, are to be sold at Tattersall's on May 26th.

On Saturday, the 5th ult., Mr. McCulloch shipped by the Hampshire from the South West India Dock, seventeen Shorthorns for Australia. His first lot, consisting of nine animals, went out on the 7th of December in the Cambrian Prince, whose arrival is announced by a Melbourne telegram dated April 1. On the 11th of January the second detachment of fifteen, sailed in the Syrian, which, being a steamer, overtook the Cambrian Prince; and the seventeen alluded to above form the third lot, consisting of eight cows, two heifers, six heifer calves, and one bull-calf, of the Oxford, Wild Eye, Waterloo, Kirklevington, Blanche and other tribes of Bates ancestry, and including Grand Duchess of Oxford 43rd from Holker.

The *New York World* states that Messrs. Doche and Sons of that city, have made extensive freight engagements with the National Line Company, by which the cattle will be taken to the port of London instead of the port of Liverpool. The company are supposed to have met the exporters by reducing their rates. The Privy Council is turn have met the company by the Order of April 4, which enables American cattle to be transferred from the Atlantic liners—in the Victoria Dock—to a steam vessel which conveys them to the "foreign animals wharf" at Deptford. This order is only issued for the term of two months.

Mr. T. L. Miller, of Beecher, Illinois, writes to the *Journal of Agriculture* that he has sold a two-year-old Hereford heifer to Mr. D. Clark, of Lapere, Michigan, for £88 6s. 8d. (400 dol.), and a six-months-old Hereford bull to the same gentleman for \$61 13s. 4d. (300 dol.); also three Hereford heifers, two yearlings and one calf, to Mr. H. Norris, of Batavia, Illinois, for £312 10s. (1600 dol.). According to this pure-bred Herefords are realising good prices in the United States.

The Messrs. Hamilton have advertised a three day's sale of Shorthorns at Kansas City, Missouri, on the 21st, 22nd, and 23rd inst. The entire herd of Shorthorns belonging to General O. E. Lippincott, of Chandleville, Illinois, is advertised for sale on the 5th of June.

A lot of black cows, in-calf, have been forwarded to Mr. M. Anderson, Dromore, Co. Tyrone, from Aberdeen. Mr. Anderson intends establishing a herd at his farm in the north of Ireland. One of the purchases was made at the joint-stock sale at Aberdeen, from the Portlethen herd, and others have been bred from the Ballindallock and Bithnie herds.

A contemporary very aptly points out that the sum subscribed to the forthcoming International Exhibition by the Mansion House Committee is only "a trifle over the amount usually expended on a couple of dinners at the Mansion House," and that a considerable portion of it has been subscribed by outsiders.

The port of Hull having been reopened for the importation of foreign cattle, a new depot has been erected by the Dock Company on the Citadel Estate, which is entirely surrounded by water. The depot, a spacious building, fitted up with requisite appliances, has been formally opened.

Mr. F. W. Stone, of Guelph, Ontario, writes to the *Canadian Farmers' Advocate* that he has sold all the young Hereford bulls he can spare to a breeder in Colorado, at prices averaging £30 per head more than his last years prices. He says the demand for them is so great that he could readily sell 500 Hereford bulls at the present time, and the first cross from these bulls is now

wanted in Colorado. Hereford bulls from the first cross are worth £14 a-piece in that State.

The New York State Commissioner, General Patrick, has promulgated an order addressed to all "owners of cattle and their employees, to all railway corporations, and, to all captains or managers of boats whom it may concern," in which he prohibits the conveyance of milch cows and other store animals by railway from the counties of Kings and Queens into Suffolk, or westward or northward out of Rockland, Orange, Ulster, Sullivan, and Delaware counties; or northward out of New York, Westchester, Putnam and Dutchess counties. All railway companies are forbidden to receive or to convey milch cows in any of the directions named. The conveyance of such cattle by boat, barge, or river craft from the counties named is forbidden, except when accompanied by a special permit bearing the signature of M. R. Patrick. Owners of cattle and captains of boats are forbidden, under penalty, to land, receive or convey such cattle.

A correspondent of the *Pacific Rural Press* sends the following statement of account of a sale of wheat in the London market. It will be seen that it costs (with exchange at par, 49½d. to the dollar) 80½ cents per cental; or 463 cents per bushel, to sell wheat sent from San Francisco to the London market. There is also to be added to this the interest on the cost from the time of laying to the time of receiving returns.—

*Pro forma* account and net proceeds of 1,000 quarters of wheat received per Swallow, from San Francisco, Cal., and sold by order and for account of Messrs. Producers and Co., London; England:—

	£	s.	d.
February 20th, 1879, sold ex-ship, at one month, 1,000 qrs. wheat, 49½ lb. each, at £2 17s. 11d.			
per said qrs.....	2,395	16	8
CHARGES.	£	s.	d.
Freights on 1,000 qrs. at 48s. per ton	531	4	7
Insurance on £2,500.....	110	0	0
Policy.....	1	0	0
Entry, Lord Mayor's order, and sampling.....	1	1	0
Moorage, liffage, lastage and portorage	27	10	0
Weighing ex-ship.....	4	3	4
Interest on freight and charges.....	2	7	0
Storage (not always occurring), 1s. per qr.....	50	0	0
Commission and guarantee, 4 per cent.	95	16	9
	823	1	8

Net proceeds due March 27th, 1879.....	1,572	15	0
If sold from the store (for ex-granary, as they term it in London), the following charges will have to be added:—	£	s.	d.
Lighterage, landing, and delivering....	39	10	0
Turning and trimming in granary, and fire insurance.....	12	13	0
	58	3	0

It costs about 7½ cent. per cental more if sold from store or "ex-granary," than from ship. With exchange at par, wheat sold at the price given in the *pro forma* account sales, ex-ship, would net the shipper 1.537 dollars per cental, free on board in San Francisco.

The same correspondent also gives returns of sales in Liverpool and Glasgow. In Liverpool, besides the charges mentioned in the above statement, are loss in weight, quay rent and insurance. The wheat, sold at 12s. per cental, netted 1.94 dollars in Liverpool, and allowing for interest and exchange, netted about 1.75 dollars per cental in San Francisco. In the Glasgow market, wheat is sold by the "bull" of 240 pounds. A sale at 23s. per boll netted 1.69 dollars per cental in Glasgow, out of which must come interest and exchange to get the net return to the San Francisco shipper.

## THE LAW OF DISTRAINT.

Mr. R. P. Blennerhassett, M.P., writes from the Reform Club to the *Times*:—

Will you, in order to prevent the misapprehension which some inquiries warn me is likely to arise, permit me to state in your columns that my motion on the Law of Distraint, after some shifting about, caused by my anxiety to secure a favourable opportunity for the discussion, is fixed for Friday, May 9?

On that day it occupies the first place on the notice-paper of the House of Commons. I intend to move, as an amendment on going into Committee of Supply, "That it is desirable that the power of distraint for the rent of agricultural holdings in England, Wales, and Ireland should be abolished." Mr. Read, the member for South Norfolk, has given notice that he will propose to amend my motion by moving to leave out the word "abolished," in order to insert the words "limited to one year's rent," and at the end to add "And that the stock of a third party taken on a farm to graze should only be liable for the amount of consideration payable for the grazing." "And," also, "that the landlord's right of re-entry for the non-payment of rent should be more simple and speedy than at present."

I shall be glad if any one interested in the subject will communicate with me here.

## WARWICKSHIRE TENANT FARMERS' ASSOCIATION.

A meeting to promote the objects of the Association was held at Birmingham recently, and about 150 farmers of the district attended. Mr. H. Stillege presided.

Mr. STEDMAN moved, "That this meeting considers it very desirable that a Tenant Farmers' Association should be formed, and pledges itself to do all in its power to further the objects of such association." He considered that the proposed association was a highly desirable one. When they considered the number of tenant farmers and the amount of capital they had invested in agriculture, they were fully entitled to be represented in Parliament. There was, however, no class so badly represented as they. Mr. Read, the member for Norfolk, was about the only tenant farmer in the House of Commons. He hoped those present would give their best attention and support to the association, and its objects.

Mr. O. GARNER seconded the resolution, and it was carried unanimously.

Mr. BRATTLE moved a resolution, inviting the Warwickshire tenant farmers to join the association, and urging upon the tenant farmers present the necessity of joining the association that day.

This also was carried *nom. con.*

Several gentlemen addressed the meeting, and general sympathy with the objects of the association was expressed.

In conclusion, Mr. J. H. HARDMAN moved, "That a meeting of the association be called at Warwick on as early a day as may be deemed convenient, to appoint the officers and committee."

Mr. JACKSON seconded the proposition, and it was agreed to. At the close of the meeting a number of farmers were enrolled as members of the association.

**AGRICULTURAL ABUSES.**—In the opinion of all persons who impartially study the subject, British agriculture will never be able to face the foreign competition which is now so severe, until it is freed from those trammels of which the foreign competing agriculture knows nothing. As long as the present system of limited ownership remains unrelaxed there will never be a proper amount spent on the land by the proprietors; as long as there is no security for a tenant's capital expended in unexhausted improvements there will never be a proper amount of money spent on the land by the occupier. The fact that Lord Beaconsfield's speech on Friday ignores both the patent and most pernicious vices in our land laws is another conclusive proof, though none was needed, that the Conservative party have not the slightest intention of correcting either the one or the other.—*Leeds Mercury.*

## THE LAW OF DISTRESS.

Professor Wrightson, in his paper read before the Farmers' Club on April 7, made as good a defence of the Law of Distress in its relation to farm tenancies as could well be made for a law bad in principle and mischievous in operation. He had obviously taken great pains to obtain a correct knowledge of the history and incidence of the law, and he stated his case with both moderation and ability. If, as appears to us, he was wrong both in his premisses and his deductions, that was inevitable under the circumstances. Whatever may be said in favour of the Law of Distress as an institution of feudal times, when it had its origin, there is no sound defence for it in these days of commercial contracts, and consequently its defenders are limited to sophisms, more or less specious indeed, but all fallacious and unable to bear the stress of searching criticism. It is seldom that a paper gets so completely cut to pieces in the discussion which follows it as Professor Wrightson's paper was, and this not from any want of ability on his part, but solely because he had a bad case to plead for. It may even be said for him that he scarcely received justice from those who followed him, as his defence of the principle of the law was strongly and almost unanimously condemned, while his concessions were not recognised. He was at least more consistent than Mr. Read, who first declared the law to be utterly wrong in principle, and then went on to advocate the retention of the law of bad principle to the extent of a lien over one year's rent. Mr. Hodges also condemned the law, and gave striking illustrations of its essential unfairness in operation, while stopping short of the logical sequence of his argument by advocating the continued application of the power of distress to the same period as that proposed by Mr. Read. Professor Wrightson recommended its restriction to two years' rent, and he extended it so far because he said that the second year of tenancy would be entered upon before a fair time for the payment of the first year's rent would have transpired, forgetting, apparently, that the same excuse would apply in the case of the second year's rent, and so on *ad infinitum*. In other respects Professor Wrightson was in agreement with all who wish to preserve the law from complete extinction, as he advocated the abolition of the landlord's right to distress stock, and the property of third parties generally. The real difference between Professor Wrightson and the other advocates of the continuance of the law under a restricted form is that he defended its principle and denied its mischievous effects, apart from its extreme abuses, while they admitted its unfairness and its objectionable influence upon the competition for farms and the consequent enhancement of rents, and yet, more illogically, advocated its retention in a modified form. Now, if the law is wrong in principle, it is clear that it ought to be swept entirely away; and, as a matter of fact, all its constant evils would remain if it were merely modified, pretty much as they exist at present. Perfect security for one year's rent is really all that a landlord requires to render him reckless as to the

means of a proposing tenant, and he would be very nearly as likely to accept the highest bidder if he had security for only one year's rent as if he had security for six years' rent. It is true that other creditors would be in less danger of finding nothing left for them in the case of the bankruptcy of a tenant after the landlord's claims had been satisfied; but the difference would be only one of degree, while we contend that there is no reason for any distinction in principle between the payment of one creditor and another. Indeed, as Mr. James Howard pointed out, if there is any difference, it should be in favour of the ordinary creditor rather than in favour of the landlord, as the former risks both principal and interest, while the latter risks interest only.

Professor Wrightson's only real argument in defence of the principle of the Law of Distress rested upon the assumption that the landlord and the tenant are essentially partners, both of whom look for a share in the profit of each year's crops. That we regard as an entirely false proposition in these modern times. The landlord lets the use of his land for a year or a term of years precisely on the same principle as the owner of a steam thrashing machine lets the use of his machine. The landlord, as a rule, gets his rent if the tenant loses three hundred pounds in the year just as he gets it if the tenant gains an equal sum. Similarly, the owner of the steam thrashing machine is paid for thrashing whether the farmer loses or gains by his crop. Both risk the loss of a portion of the sum due to them, and both should enjoy an equal chance of getting paid. As the law now stands the landlord has almost perfect security for the whole of his claim, while the owner of the thrashing machine has no security whatever for the whole of his claim, and even the portion which would otherwise be fairly secure if it were not for the Law of Distress is liable to be swallowed up by the unfair preference of the landlord's claim. But the case of the owner of the thrashing machine is too much akin to that of the landlord to show the full force of the argument against the Law of Distress. He, like the landlord, speaking broadly, only risks the interest on his capital. To be exact it must be admitted that both risk a little more, as both employ servants and have some expenses, in connection with letting their possessions, to meet. But in the case of the manure and cake merchant the position is far stronger. This man has a better claim to a lien upon the growing crop and the proceeds of the sale of live stock than either the landlord or the owner of the thrashing machine has, as his capital and interest are largely employed in the production of the returns of the farm. Very often he gives greater value towards a year's produce than the landlord gives, as his bill is not uncommonly larger in amount than a year's rent. It is true that the landlord may have his property deteriorated as well as the interest on his capital lost; but the manure and cake merchant may lose his capital and interest entirely, so far as it is in the tenant's hands. Rents in England are

almost universally due, and are generally paid, half-yearly. Professor Wrightson's statement to the effect that they run nine months is obviously incorrect. It is somewhat common for the rent to be only demanded three months after quarter day; but although the tenant has nine months before his first half-year's rent is demanded, it is only six months from that time to the next payment, and so on for the rest of his tenancy. Thus the leniency in the time allowed for payment really operates, except where a tenant is allowed to get seriously into arrear, only at the beginning of the tenancy, when indulgence ought not to be needed, and operates mischievously by tempting a farmer to take more land than he has capital to farm properly. Such temptation has a bad effect upon the interest of all parties concerned in the cultivation of the soil, with the doubtful exception of the landlord. It is argued that even the landlord is injured in the long run; for although it is admitted that one effect of the Law of Distress is to increase artificially the competition for land, and so to raise rents, it is urged that another effect is to impoverish estates. There is, however, an anomaly in this argument which can scarcely be explained away. Either the Law of Distress permanently enhances rents or it does not. If it does, the landlord cannot be injured by it; if it does not, one of the pleas urged against the law falls to the ground. It may be said that although the effect of the law is to raise rents above their intrinsic value, it nevertheless depreciates the actual value of land by keeping it in an unimproved condition, so that it lets for less than it would otherwise, in spite of its bringing more than it is intrinsically worth; but this argument in effect assumes that a landlord has a right to an increased return on his tenant's improvements, without first paying for them, which we regard as an outrage upon the true principle of Tenant-Right. It is quite clear, however, that all other parties concerned in the good cultivation of the land are more or less injured by the operation of the Law of Distress. The tenant is injured because he has to pay a higher rent than he would have to pay under natural conditions of competition, and also in the impoverishment almost certain to follow upon taking a large acreage when he has only capital enough to render him master of a smaller area. In this connection one important consideration is never mentioned. It is this, that the tenant who takes more land than he can do justice to not only farms less profitably than he would if he had fewer acres, but is tempted to a more profuse household and personal expenditure on account of the higher social position which, as a large farmer, he occupies. Upon farm labourers and consumers the evil effect of a law which tends to promote poor farming is too obvious to need detailed statement; and the wrong which it inflicts upon the tenant's creditors, with the sole exception of the privileged and protected landlord is, if possible, more obvious still.

Professor Wrightson's attempt to show that the abolition of the law would not have the effect of lowering rents was lame in the extreme. He argued that landowners would farm their own estates, and so render farms more scarce for

tenant-farmers; but Mr. Read effectually disposed of this fallacious reasoning by pointing out that at the present time, although on large numbers of estates farms can only be relet at a great diminution upon previous rents, their owners show no disposition to keep them in their own hands. If lower rents will not induce an owner to farm his own land, it is clear that less absolute security will not.

There are other aspects of the subject with which we should have been glad to deal; but it is impossible in a single newspaper article to exhaust the subject. It is now prominently before the country, and there will be other opportunities of commenting upon it and the controversy which it has raised. As will be seen by Mr. Blennerhassett's letter in another column, that gentleman is about to bring forward a motion in the House of Commons declaring that it is desirable that the power of distraint for rent should be abolished. Our Farmers' Clubs and Chambers of Agriculture may with advantage discuss the subject in the mean time, in order that the general opinion of farmers upon it may become known. What the opinion of the London Farmers' Club is was pretty plainly expressed on Monday, and if a resolution had been allowed there is little doubt but that one in favour of total repeal would have been carried by a large majority.

## ENTOMOLOGY AND AGRICULTURE.

The study of entomology is not often made part of a farmer's education, nor is it usual to find a practical agriculturist who has so much as an idea of the life-history of any of the insects which exercise so great an influence on plant-life, for good or for evil—mostly for evil. This is much to be regretted, and it is to be hoped that in future the lads who are to be farmers will not only be taught the rudiments of entomology, but be specially educated in other ways, so that they may have something more than mere rule of thumb to guide them. Those who have given attention to entomology are invariably impressed with the magnitude of the part which insects play in the operations of Nature, and with the helplessness of man in dealing directly with their power. As the gradual silting-up of a river bed, by the deposit of minute particles of matter suspended in the water, may occasion an outbreak, so to speak, of natural forces with which man is utterly powerless to deal—such as has recently occurred in Hungary—so the spread of the grape-vine louse, at first unnoticed and unappreciated, has devastated the vineyards of America, all but destroyed the wine-producing industry of some parts of France, spread over a great portion of Southern Europe, and has now commenced in Australia. The ingenuity of man has hitherto failed even to check its progress, much less to cope with it effectually, and the losses it has occasioned are enormous. In France alone it was estimated four years ago that the damage it had done represented a greater sum of money than was paid as a war indemnity to Germany. In America the potato-beetle emerged from its obscurity at the foot of the Rocky Mountains, and traversed the entire Continent, eastward.

in search of a plant for which it had acquired a liking, carrying destruction in its course in spite of all that could be done to prevent it. In Europe we hear occasionally of large districts being invaded and conquered by an army of locusts, or of the larvæ of white butterflies; and in England we are subject to periodical visitations from various insect enemies to agriculture, insignificant in their units, but strong collectively, which defy the farmer and destroy his crops while he stands helplessly looking on. And besides these extraordinary cases in which insects have overcome the natural laws by which they are usually restrained, there exists a power on their part to increase with such marvellous rapidity, wherever food is found in plenty, that were it not for our friends the birds, and a few insectivorous reptiles and mammals, together with predatory and parasitical insects, they would soon consume and destroy plant-life to such an extent as to crowd man himself out of existence.

Yet how little have we hitherto done by way of protecting and encouraging our feathered friends to whom we owe so much! In France, and in some parts of Germany, there have been some practical steps taken by the State Departments to exert a direct influence on insect life by collecting and destroying the larvæ (grubs and caterpillars) of some species, and by making known to children the useful services of birds and other insectivorous animals; thus soliciting protection for them, and educating thoughtless youth in habits of observation and usefulness, instead of wanton destruction and mischief. But we have not, as yet, done anything of the kind in this country. If a boy sees a bird, or a frog, or a bat, he throws a stone at it; and if a farmer sees an insect he seldom makes careful observation of its habits. In the case of well-known injurious insects, such for example as the turnip-beetle or the wireworm, very little practical knowledge has been brought to bear on their life history, so as to enable farmers to cope with them when most accessible. To this end habits of careful observation, and at least an elementary knowledge of entomology, will be of great service, and we cordially welcome Miss F. A. Ormerod's "Notes of Observations of Injurious Insects" as a very praiseworthy attempt to render assistance in this matter. We have no doubt that the yearly reports, which this lady is good enough to make for the benefit of farmers and gardeners, will prove highly useful, as the interchange of information, and the mere fact of directing attention to the subject cannot fail to be of service, as she very justly remarks. The Report is published as a pamphlet by West, Newman, and Co., of Hatton Garden, London. It contains wood-cuts of several species of injurious insects, and a digest of the communications received from various correspondents during the year 1878. It is suggested that correspondents should give more complete details of their observations, not only as to direct injuries caused by the depredations of insects, but also in respect of contingent circumstances, such as the fertility and cleanliness of the soil, the character of the wild plants growing on it, the state of the weather, and any incidental matters connected with the cases. "There seems little doubt," says Miss Ormerod, "but that it is

in the small appearances that we shall probably find the key to the great devastations. In themselves it is truly said that they are scarcely worth notice (though all the same the smallest loss of crop has its inconveniences); but when the sweep of insect injury comes it is often past the point at which we can tell its origin, as well as how to terminate it. Each note of information, even if incomplete in itself, will or may probably join on to those of other observers, and thus the circumstances which give rise to insect ravage be gradually more and more clearly made out, till we may hope, if not entirely to check the evil, at least to mitigate it greatly. . . . Any communications addressed as before to the Rev. T. A. Preston, Marlborough; E. A. Fitch, Maldon, Essex; or to myself at Dunster Lodge, near Iwerworth, will be duly attended to."

The report is full of useful suggestions and information; such, for example, as that certain plants supply food and shelter to certain species of insects, the charlick being a favourite *habitat* of the turnip-beetle, and the blackthorn affording refuge to the gooseberry caterpillar; the larvæ of the wheat-midge is harboured in neglected chaff-heaps; the clover weevils are present in stacks, &c.; and numerous details to which we cannot refer, but which will well repay perusal. Indeed, we earnestly recommend our readers to obtain the pamphlet and read it carefully. The year 1878 is alluded to as having been, on the whole, unfavourable to insect life. Possibly the abnormal character of the seasons induced premature metamorphoses, the mild winter bringing forth imago forms when plant life was not in a condition to support them or their larvæ, and later on the cold wet spring and early summer may have retarded the development of the imago stage in other species until the season was too far advanced to admit of their successful life-economy. These are matters which need careful and intelligent observation, for in them may probably be found a clue to the excessive numbers of some one particular species appearing one season and being almost absent in another. It is known that the metamorphoses of insects may be retarded or accelerated by external influences, and this, too, may throw some light on the subject. The farmer's study should be to make use of such means as are known for the purpose of checking these insect pests, and to aid the birds in their work, as well as to try to find out by observation fresh methods of warfare. The most obvious remedial measures will be found in systematically destroying such wild plants as may be known to afford subsistence to insects which injure cultivated plants; and a knowledge of the life-history of the more injurious species will often enable simple means to be taken to destroy them, or to bring about their destruction. Thus, the wireworm cannot make its way through compressed soil, and rolling with a Cambridge roller makes the insect come to the surface to get over the obstruction caused by the indentations; and when on the surface of the ground it falls a ready prey to birds which are on the look-out for it, being aware of its presence from the dead or dying plants the root-stems of which it has cut through. In fact, the whole subject of the economy of insect life should

be of much interest to the farmer; for although he suffers greatly from the depredations of some species, he is dependent on the services of others to effect the fertilisation of the flowers of some cultivated plants, which otherwise could not perfect their seed. An agriculturist cannot be less fitted for his occupation by being, as far as he may be able, a naturalist as well.

## THE AGRICULTURE OF WALES.

BY GORDOVIC.

The columns of the *Mark Lane Express* have recently contained a most variegated collection of letters and remarks of a "blessed" and "cursed" character on "Agriculture in Wales." Just to distinguish my present and future communications from those interesting articles my heading, you will be good enough to observe, is "The Agriculture of Wales." I am acquainted with some of the writers, and can agree and disagree with much of what they say. I have some knowledge also of those fields and estates to which they refer. At present I have no disposition to enter into the merits of their controversy, but will endeavour to keep clear of it, and strike out a perfectly independent course.

In drawing attention to the agriculture of Wales it would be well to take a general survey of the whole field of view. Wales is sometimes supposed to be something like a good-sized county bordering on England proper. A country simply of hills and mountains, of crags, precipices and rocks; of wild mountain ponies, and much more wild mountain sheep; a country of storms, torrents, and floods, and of those black cattle grazing on their banks, bearing the euphonious title of "rants." If we are to accept the evidence of recent observers, besides being the land of poetry and song it is also the land of be-witched, be-cursed, and be-blessed fields and farms. Just probe through the crust of its earth and you will there find another supposed race of little folks prematurely digging out its mineral riches. With all these creations of the imagination, Wales is a real, tangible, practical agricultural country. Instead of being simply a border county she is really a principality worthy of the first title of the eldest son of England's Queen, and consists of 12 or 13 counties. Why this 12 or 13? In anything like a Chartist riot in any Newport of Monmouth, of course we Welshmen cut the connection and deny the relationship. When the public press had their news headed sensationally, "Chartist Riots in Wales!—Newport sacked!" we then took leave to acquaint them that Monmouthshire was a part of England proper. When, however, any honour falls to the lot of Monmouth we then claim relationship. Here is a case in point, and germane to the subject under consideration: Mr. Stratton, the owner of the Shorthorn heifer "Icicle," the champion of Birmingham and Islington shows, has the good fortune to hail from Duffryn, Newport, Monmouth. We shall take advantage of the Welsh "Dyffryn," and of course claim that county part and parcel of Wales, falling back on the old national term of "thirteen counties of Wales."

Whether you give us Monmouth or not we are divided geographically into North and South Wales, and subdivided into six counties in each division. Wales proper has a total superficial area of land of all descriptions, and of water of 4,721,823 acres, giving about 8½ acres to each person of its population. The latter is now assumed to be 1,300,000. The population of Wales is about one-twentieth of that of England. Very few people will give her credit for being in acreage just one-seventh of the size of England. Her annual rental is about £5,294,329.

She has a pauper population of about 71,000, and a poor-rate of £617,000 per annum.

No part of Great Britain or Ireland has a greater variety of geographical aspects, geological formations, and different soils. The beautiful and slightly undulating vales are in strange contrast to its crags, rocks, and mountains piercing its clouds to a height of 1,000, then 2,000, then 3,500 feet above its sea level. Its natural fertility in some parts is in extraordinary contrast to its sterility and extreme poverty in others. The annual value of some parts is not worth more than 6d. an acre. Many thousand acres of its profitable sheep-walks were recently let under 3s. an acre; even now they are let at 1s. 6d. an acre. Farms of 10s. an acre rental have a variety of meadow, arable, pasture, and rough, healthy land. Where in Great Britain is there richer grazing lands than on the banks of the Wye, the Severn, the Vysnyw, the Tyvi, the Aled, the Elwy, the Clwyd, and the Dee? In the neighbourhood of Buttington-bridge, below Welshpool, the Dolybont is renowned in ancient and modern history as some of the fattest grazing land in Britain.

As is the country so are its inhabitants. We can point out as many sound, practical, scientific farmers comparatively as in any part of the kingdom. Some first-class farmers and graziers pay as high as £3, £4, and £5 an acre rental for their lands. Of course they are accommodating and exceptionally good lands. Whilst all England rings with the alarm of agricultural distress, falling rents, abatements of large per centages allowed by considerate landlords to their tenants, Wales can point out the extraordinary phenomenon of a great advance in the rentals of some particular estates. The owner of a large estate bordering on North and South Wales has succeeded in advancing their rents, commencing this year about 20 per cent. higher than previously.

The wages of farm labourers and servants, male and female, have doubled in the last 20 years. Reviewing, however, the course of the agriculture of Wales over a period of the last fifty years, in spite of all the obstacles and difficulties of rents, wages, and taxes, she stands at the present day most decidedly in a very improved condition.

Wales has her first-class farmers. Will too great liberties be taken if they are placed on a par with the first-class farmers of England? We don't bet the question, but will appeal to facts. Flintshire, in the North, has, through her old agricultural societies and members, produced a fine race of farmers, some gone to their long rest, others still remaining. The ploughing of Flintshire boys, through the annual matches, has been brought nearly to perfection. The straight furrows, parallelograms laid at such beautiful angles, seem to be the work of highly educated mathematicians rather than clodhoppers. What has been done in the ploughing has also been fostered in the raising of green crops and a superior grade of cattle, culminating in several pedigree Shorthorn herds—Bates, of Kelsterton, Mostyn, Pengwern, Talacre, in times past, and Bodrhyddan, &c., in the present, may be mentioned. Colonel Shipley Conway's sale last autumn, too, showed what could be done by Welsh farming. What better class of farmers does require than Jenkins, of Plas-y-ward, who is now a Denbighshire man? Flint and Denbigh have united their agricultural societies, and jointly make a very fine annual display. I must not forget Mr. Scott Banks, the successful exhibitor of pigs. Around all these gentlemen, in these two counties, you will find a class of intelligent and successful farmers—proved not only by the prizes they win at shows but by the appearance of their farms, stock, and above all their bankers' books. They have made two blades of grass grow where one only grew before. For the raising of a first-class cloverseed the farmers of the Vale of Clwyd



have distanced all the farmers of Great Britain. Welsh cloverseed sells higher than any seed in the market.

In Carnarvonshire the lordly owner of Penrhyn Castle is, I suppose, taking him for all in all, the premier breeder of Shorthorn cattle in North Wales. Anglesea, again, for show purposes, generally joins with Carnarvon. Besides his Shorthorns Lord Penrhyn has been fostering and improving the native Welsh breed. In these two counties we are in the strongholds of a native breed of black cattle. When I make use of the term "native breed" I am only following custom. Seriously, I do not admit the Anglesea black, the Carnarvonshire, Merionethshire, and Cardiganshire black, nor, indeed, the celebrated Castle Martin black to be descended from the real Welsh native breed. They are foreigners to Wales. We must accept the inevitable, and lament that the real thoroughbred Welsh cattle are defunct since ages ago.

Anglesea has a fine climate, a fine soil, and a fine race of energetic farmers. Landlords and tenants vie with each other in bringing to bear on the cultivation of the soil a large amount of capital, labour, patience, and enterprise. Anglesea possibly has her peculiar breed of black cattle, and large-sized white-faced sheep, more generally disseminated through and more confined to their own county than anywhere else. To what are we to attribute the exceedingly high position Anglesea takes in raising large crops of swedes and mangels? They certainly have a peculiar root named "Welsh Tankard Swede," and I believe, as a general rule, their drills are a few inches nearer each other than is elsewhere the case. It is worth examining how to account for the generally very good green crops, and in some exceptional cases the extraordinary heavy crops of swedes and mangels. Some of the heavy mangel crops in England are, of course, the effect of judicious applications of sewage; but Anglesea has no sewage works as yet to apply the manure to her lands. In the national competition for prizes given by Proctor and Ryland & Co. and other artificial manure manufacturers, Anglesea is never behind—always to the fore, and in very many cases the actual winner. She is a sea-girl county. Blow the wind from where it will, it will always be a sea-breeze. She has no high mountains. She has a good soil, and farming in Anglesea is the county institution. The glories of her Parys mountain have passed away. If she prides herself on anything it is on her farming. Whether any one of these circumstances, or whether some or all of them combined, are the cause, Anglesea may fairly challenge any county in Great Britain for the growth of swedes. In referring to Anglesea we cannot do so in an agricultural sense without regretting the great loss she has sustained through the death of the late lamented Sir Richard Bulkeley, Bart., of Baron-hill. A thoroughly practical farmer, farming was his passion. Another "turf" competed with the green turf of Anglesea for his affections. Warmly as he was attached to the pastime of horseracing, and successful as he was from the time he bred and ran his Pickpocket, Miss Maria, Acanthus, &c., down to Old Calabar, his home farm-yard, green fields, sheep, cattle, and pigs fairly won his affections. Whether as landlord, farmer, or neighbour, he was a jolly good fellow. Farming well himself, his example was followed by a large circle. The influence of that example is likely to last for generations yet to come.

Anglesea has the distinction of being titled in ancient history as "Mona, the mother of Wales." In an agricultural sense, she at present, by her fostering care, can lay claim to being a motherly county. I cannot quit Anglesea and Carnarvonshire without mentioning the name of Mr. Dew, of Bangor. He has worked hard for the advancement of the farming interest, and has

proposed some good plans for future working. If adopted they will bear good fruit.

The next locality to be noticed is Llleyn and Eifonydd, in Carnarvonshire. This is an extensive promontory on the sea-board of the latter county. To an Englishman fond of studying the orthography of the Welsh language the very name is full of interest. I trust you will be very careful of the *L* at the commencement, the *f* about the middle, and the double *d* at the end. There is here a good deal of high-class farming. Some time ago it used to bear the palm as a fat-bacon producing place. I hardly think it sends so many fat pigs to English markets as in old times. It has, however, through the local industries, a better home market than it formerly had. The general motto of the farmers here is progress. Their Local Agricultural Society will show that they are marching forward with the times year after year. This county has several families who are devotedly attached to the black cattle of their old ancestors. The Pritchards and the Humphries just show what can be done by "selection of the fittest" for breeding purposes, and are possessors of a beautiful race of black cattle.

Merionethshire is one of the most rugged, craggy, rocky counties of North Wales—quite as much so as Carnarvon. It is true her Cader and her Aran do not leap up so sky-high as Snowdonia, still she is on the whole an uneven, wavy county. Looking at her from the top of the Cader you would suppose she had not a single enclosed farm, nor a single herd of cattle, nor a team of horses within her precincts. Descending, however, and turning to the right and left, poking here and poking there, you will find many a charming spot of flat land, side-land, and good grazing upland. Generally the black breed predominates, or a red, and again a bridled coat. One colour has as good right and title to the term native breed as the other. Merioneth and her borders has several agricultural societies, the chief being the county one. The latter society has had the good fortune to be pioneered by Mr. Thomas Ellis, of Bala. In his attachment to agriculture in all its branches, and his ardent love of all field sports, he has no superior. His abilities for organisation and administration are of a very high order; backed as he has been by all the leading land owners and chief tenant farmers of the county, it is no wonder the Merionethshire Society proves so successful. Several picks of this county were exhibited at the last Liverpool Royal Show, and prove what can be done in the Welsh black cattle line. At the last shows held at Towyne the exhibitor of best black cattle proved to be Captain Best, of Plasynvifod. By his exhibits of black females of several ages he most decidedly showed his title to his name. If this county only makes a similar advance during the next ten years to that which it has made lately, there will be something great to boast of. In the bull class there is great room for improvement. Whilst the highest praise is due to the cow and heifer classes, it is refused at present to the bull classes. The best pair of bullocks exhibited by Mr. Daniel were purchased by Sir Watkin Wynn for £70, and are being prepared for exhibition at the International Show to be held in London in July. Mr. Ellis and his friends at Bala have also the honour of introducing sheep dogs and making them so popular. These annual gatherings of shepherds, chiefly Welsh highlanders, who have resided far away from the influence of all modern usages, have at last brought something into contact with them which gives them a taste for lawful contention. Hitherto they took no part in boating, racing, cricketing, football—nor indeed in breeding horses, cattle, pigs, or sheep on an improved plan. Here is something to give their minds an impetus, and if continued as they have been commenced they will be the one means of raising the shepherd class.

If I briefly glance at the agriculture of Montgomeryshire, I shall have made the circle of North Wales. We find a noble race of landlords in this county, whose practice is really to carry out your motto, "Live and let live." It matters not what their politics are; taking them all together they are a set of fine fellows. Nothing gives them greater satisfaction than to know that their tenants are doing well. This county excels in breeding Hereford cattle, draught horses, Kerry and Shropshire Downs, and mountain Welsh sheep. Bordering on Herefordshire, the farmers have availed themselves of such close proximity for the purchase of good bulls. Lord Powys at the last Birmingham show was to the fore in the Hereford classes. In the neighbourhood of Llanidloes, Newtown, Montgomery, Welshpool, and Llanfyllin, the tenant farmers are possessed of excellent herds of Herefords. Richards, of Greenhall, has exhibited at the Royal, and got commendation at all events. The latter position is not one to be despised. Leighton Hall is also celebrated for its first-class herds of cattle. This extensive farm has all modern improvements on a commensurate scale.

Welshpool and its neighbourhood several years ago started an Entire Horse Company, or Society, or Club—just which name you like. Its members have given prizes of £100, open to all England, for the best entire draught horse, and they guarantee to serve a certain number of mares at a certain fee of about £2 each. It is to be continued for this year. Just now the results are coming to view. From the continuation of the Club they must prove satisfactory. Certain it is they have had some of the finest entire draught horses in England to enter their service.

Before closing these remarks on Montgomeryshire, I cannot help regretting the decay, if not the entire disappearance, of a breed of cattle whose home was here. I refer to the dark red smokyface. What the dark reds were to Devon and the whitefaces were to Hereford, so was the smokyface to Montgomeryshire. Your columns inform us that a nearly extinct race of red polled Norfolks is being resuscitated, and with every promise of success. It is to be regretted that some-one or more does not take up the continuation of the smokyface with a determination to succeed. I am aware there are still a few breeders who believe in them. The cattle themselves are hardly ever to be seen.

The woollen staple trade of Montgomeryshire has the good fortune to be above grumbling; indeed there are more praises than blames. Llanidloes has a few factories closed from exceptional causes, and several small mines are stopped. This has caused much distress there. Newtown, however, can say that all goes on as merrily as a marriage bell. Erection of new palatial establishments is the order of the day there. Therefore, so long as manufacturers keep going, beef, mutton, pork, butter, cheese, poultry, and eggs, will be required, and farmer John will be kept on his legs.

The above view of North Wales is as it actually appears. How long will it last? I fear, unless a change for the better in the state of national affairs takes place, that it will not last long. The last great industry of Wales to feel the effects of bad times is the slate quarrying. Last month at least ten thousand men were idle in the quarries, partially in consequence of the weather, but more on account of dull times. That means the stoppage of from fifteen to twenty thousand pounds weekly wages—splendid customers for all farming produce. Thousands are again thrown out of employ by the stoppage of lead mines, collieries, ironworks, brickworks; and, last of all, there comes a stoppage of eight hundred men in Muspratt's flint works. If all these things continue, they will tell heavily on the farming interest.

North Wales is *entirely* surrounded by a circle of rail-

ways, besides branches, and several cross-country lines. From Cunnah's Quay in the east to Aberdovey in the west she has at least a dozen ports and harbours. She is intersected in all directions by telegraphs; she has a twice-a-day delivery of letters; she has a few hundred markets held every week, and stated fairs held every year. She has her two bishops and a thousand clergy of all denominations; she publishes at least a dozen newspapers within her borders, and has all the dailies and weeklies of London. She has several colleges for the higher education of her young men, and numerous schools of all classes for the education of her youth. Her Sabbath schools are attended by at least a quarter of a million. The grand chorus of all these people is "God speed the Plough."

## A NEW GRAIN-EXPORTING COUNTRY.

Within the last two years, a new source of supply for cereals has begun gradually to work its way to the front. I use the term "new" as applied to the introduction of River Plate maize, wheat, and barley into our home markets, because until recently this source of importation was fitful and inconsiderable. Causes which, anterior to that period, led to this paucity of supply, appear now to have been permanently removed, and we may shortly find that our home consumers will not depend, as in former years, solely on the productions of North America, Egypt, India, and Danubian ports.

A country more richly dowered by Nature for the cultivation of grain than the provinces of Rio de la Plata or Argentine Republic can scarcely be found on the globe's surface. In former years the rapid increase of its countless herds—the certain revenue to be derived from its wool, hides, skins, tallow, and other raw materials, with only a fractional amount of labour, rendered the Argentine less careful in utilizing the splendid capabilities of the territory at his command. As an inevitable sequence, however, not alone of national growth and the necessity thence arising, of deriving from previously neglected means the wherewithal to meet the increasing wants of an increasing people; but equally in obedience to the law of progress from a first or pastoral stage to a second or agricultural one, the Argentine has begun earnestly to appreciate his opportunities. Two or three seasons of exceptional abundance in the cereal crops on both sides of the Rio de la Plata have doubtless strengthened, if not inspired, his resolution. The subjoined tables, framed from statistics of the years 1870 to 1877, will show more succinctly than mere description the advance which the cultivation and export of cereals has made latterly in that country, the details being translated from the *Prensa* of Buenos Ayres, of date 1st ult. :—

### MAIZE.

#### IMPORTATION INTO BUENOS AYRES.

1870 to 1874.....	Kilograms 60,964
1875 .....	" 60,676
1876 .....	" 14,053
1877 .....	"

#### EXPORTATION FROM BUENOS AYRES.

1870 to 1874 .....	Kilograms 5,695,607
1875 .....	" 222,616
1876 .....	" 8,058,369
1877 .....	" 9,817,605

### WHEAT.

#### IMPORTATIONS INTO BUENOS AYRES.

1870 to 1874 .....	Kilograms 19,524,915
1875.....	" 4,887,451
1876.....	" 335,006
1877.....	" 600,190

## EXPORTATION FROM BUENOS AYRES.

1870 to 1874 .....	Kilograms 888,764
1875 .....	"
1876 .....	" 20,868
1877 .....	" 199,611

These tables show that the importation of cereals into the Argentine Republic has been almost stopped, and that in the year 1877 the country not only met its own wants out of its maize growths, but exported over and above a surplus nearly double its entire export in the four previous years. The same progressive feature, although to a lesser extent, is noticeable with regard to wheat, which is reported to have shown the largest crop this season ever grown in all the East of South America, representing an approximate value of five millions sterling.

Barley, so far, has had a much smaller outlet on that side of the Atlantic, partly because the production is comparatively small, and partly, it may be, that other sources of supply have a narrower margin there.

Flour, of which the local production, particularly in the upper and interior provinces of the Republic, is large, having now all but ousted importation from Chili and the United States, will doubtless follow suit, probably finding its way in quantity to British markets in course of a no her season.

Shipments of maize and wheat are already being freely made to London, Liverpool, Antwerp, Havre, Italian ports, and even to the Cape of Good Hope. It may happen, therefore, that the British consumers who give a fair trial to the River Plate productions—setting aside the system of “see and wout” which, comparatively speaking, blinds them to what they have been in the mere habit of buying—will have no reason to regret providing, by that test, for periods when old supplying channels may be clogged by one contingency or another.

MANUS.

## FARM RENTS AND FREE TRADE.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR.—A fall in the rental of farms means a real and positive depreciation in the value of land. This is a matter of general interest and national importance. As long as the discussion was confined to such questions as the relations existing between masters and men, or arrangements and covenants between landlords and tenants; as long as farmers could be quieted by such scraps as the expectation of a repeal of the Malt Tax, by an Agricultural Holdings' Act, a Contagious Diseases Act, or by an occasional return of 10 or 15 per cent. on their half-year's rent, the country could well afford to leave those immediately concerned to themselves. Free Trade had annihilated the old protective tariff, and the nation was content to accept its benefits without inquiring too closely upon whom the burden of the change fell. But when, as now, the wild competition for farms has ceased, and farmers not only assert in words but prove by actions their conviction that the present rate of rents cannot be supported under present conditions, we are brought face to face with that possibility to which I have just referred, viz., a depreciation in the value of the land.

That farming, as now conducted in the corn-growing districts, does not and cannot under present prices pay needs no demonstration; but opinions may greatly differ as to the cause of these prices and their probable continuance. If the depression is but a temporary one it need occasion no anxiety nor attract any general notice, but if, as is my own conviction, it be the natural inevitable result of the sweeping repeal of the corn laws in 1846, then the measures which must be taken to meet that result pass at once from the region of class legislation to the wider one of national politics.

It is a great mistake to attempt to judge of the effect of free trade in corn by the average prices of the past 33 years. The change could be made at once, but it needed a generation to pass by before its effects could be fairly felt or measured. The opening of our ports to the foreign producer was not like the opening of floodgates with a vast accumulation ready to burst out and inundate the lower regions. The reality of the change had first to be grasped, then years had to elapse before tracts of land, however well fitted for the growth of wheat, could be adapted to its cultivation. Facilities for conveyance had to be planned and carried out, roads and railways to be constructed, overland and submarine telegraph lines to be devised and executed, commercial arrangements to be organised and perfected. Well, Sir, years have gone by, this great work has been accomplished, and it has proved sufficiently satisfactory to warrant the continuance and extension of the system. From east to west the stream flows in with steadily increasing volume. We see its progress, we feel its effects, and it only remains for us to consider how we may best meet this world-wide competition.

A few facts relating to this staple commodity, wheat, will partly show the bearing of all this on the individual farmer. The yield on a good average farm of about 500 acres may be roughly taken at 800 quarters. This at 80s. per qr. amounts to £1,200, and at 40s. per qr. to £600. Much of the wheat grown last season and injured by rain at harvest time (but nevertheless forming part of that produce by which the farmers' expenses have to be met) will not realize 50s. per qr.

Under Protection the price of the produce would, to a great extent, be determined by the yield, and so a compensation be afforded for the short crops; but this, with open competition, ceases to be the case, and it is easy to see how the money value per acre, which is the true test of profit, is affected. In seasons when the yield and quality are good the price depends on the total supply, including all imported from abroad. Again, when the yield is bad, but the quality good, the price per qr. will differ but little from the previous one, but the difference in the return *per acre* will be seriously felt by the farmer. Let, however, the crop, as in the past season, be injured by a wet harvest, the price of good wheat may still undergo little alteration; but the farmer will have the satisfaction of seeing the following quotation in the market reports—“English wheat, being damp and in bad condition was neglected.” Under these circumstances to what shall we look for compensation? Free Trade surfeits the market with oats. Barley, except the best malting, is met by the same gigantic rival. Other products, such as beef, potatoes, fruit, &c., all meet this protean antagonist, and, therefore, I conclude that the general result of the great experiment of free trade in corn is that the good years of the farmer are converted into moderate ones, and his bad years into ruinous ones, and that even though he may find a partial relief in such minor changes as may be effected by legislative enactments, or alterations in his system of cropping, he will find that all added together bear no comparison with the injuries inflicted by the great blow of Free Trade.

Such arguments as these, but a few years back, were unheeded and fruitless. However farmers might be feeling the pinch of Free Trade, grumbling at the times, or looking anxiously at the future, all complaints were met by the answer “Well, if you like to give up your farm, plenty of men as good or better than you are anxious to take it,” and so they struggled on hoping against hope and waiting like Micawber for “something to turn up.” Men enriched by that commercial prosperity which advanced by “leaps and bounds,” were eager competitors for vacant farms and were content with a nominal percentage

on the spare capital they invested in them so long as they attained that position, and were free to indulge in those country sports and occupations so dear to the hearts of all Englishmen. But these times are past. This highly magnified blessing of Free Trade might, indeed, dispense the cheap loaf to the masses, but this potent weapon, in reliance on which the English manufacturer challenged the commercial world, has met its match in other as well as in the agricultural departments, and now engineers, iron masters, mine owners, millers, cotton spinners, and wool-staplers are fain to strain every nerve in their struggle with that giant "Competition" they have called into existence, and have little inclination to dwell on the *offium cum dignitate* of the once loved farm.

This diminution in the competition has enabled farmers to look more rationally and more hopefully on the question of rent, and the great rise in the cost of labour has made it a matter of vital importance. A crisis is reached. The experiment has been fully and fairly tried and the practical conclusion at which we arrive is, that, as the country approves the policy and accepts the blessings of Free Trade in corn, it must for the future be content to pay for it in the shape of a reduction in the value of land necessitated by a considerable fall in rents.

I have little faith in the efforts made in some quarters to obtain relief by sending tenant farmers to Parliament, and, speaking generally, I much prefer to leave the representation of the agricultural interest to those who by position, leisure, means, interest, and education are best qualified to represent it. The advantage of all laws which tend to increase the tenant farmers' receipts or profits must ultimately be shared by the owners who will naturally take all such considerations into account in fixing the amount of the rent.

Farming is a business, and must be managed on commercial principles. We have already paid far more than our fair share of the Free Trade experiment, and we must no longer suffer ourselves to be beguiled into losing sight of the main issue by the intervention of any of those will-o-the-wisps that may present themselves. The part of the tenant farmer may often be difficult, but it is clear and simple. It is to determine for himself what rent he can afford to pay, and if, owing to Free Trade or any other cause whatever, that rent is unsatisfactory to the owners of the land they will be found quite able, and certainly willing, to lay their case before the country.

I am, Sir, &c.,

Mount Farm, Cuckham Down. W. BULSTRODE.

## THE AGRICULTURAL SITUATION.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—The recent discussions in both Houses of Parliament have made one point clear, and that is that the system of British husbandry as at present pursued is unable to bear the strain that is put upon it, and important changes must be introduced or a collapse is inevitable. First and foremost comes the crucial question, is it reasonable or fair to expect, or is it practicable for the British farmer successfully to compete with the unlimited free importations of foreign farm produce from the whole world while he is fettered and handicapped with obsolete covenants which embarrass enterprise in his occupation, with insecurity of tenure, and, more than even these, tenant right in his outlay not recognised by statute. When English soldiers contended with the soldiers of freedom in the United States the great Lord Chatham told his peers that "he believed they could do anything but impossibilities, and that to conquer America was an impossibility." So say British farmers now; they are prepared to do anything in their vocation but impossibilities, and successfully to compete with free unlimited imports as they are at present situated is an impossibility.

A primary necessity to stimulate the energies of enterprise in the neglected farming lands of England is to induce capital to operate on this great national industry; but in order to accomplish this it is indispensable that the tiller of the soil shall have free scope in his cultivation and security for the value of unexhausted improvements. Experience tells us that there is nothing capital holds more aloof from than uncertainty in the conditions in which it is sought to be employed. Then let us no longer deter capital by laws averse to commercial equality.

Security with freedom in farming has now assumed a national aspect, meaning as it does increased production of food from our soil for our teeming population, benefiting alike all interests, increasing the demands for manufactures and trade, and essentially improving the property of the landowner. I may go further, and say it is neither politic, safe, nor just to limit the supply of food of 30,000,000 of free men by laws favourable to the few at the cost of the rest. It was the writer's privilege in 1875 to listen to our Premier (then Mr. Disraeli) when one of a deputation to him on the subject of "farming tenant-right," and to his eulogy on that most distinguished authority upon agriculture, the late Mr. Philip Pusey, M.P. Mr. Pusey is admitted by all agriculturists to be a generally accepted authority. He specially addressed the landlords of England in the following words:—"The subject of unexhausted improvements seems to me to be the most important of all agricultural questions, and improvements in our agreements in this respect to be a condition *sine qua non* of any steady and general improvement in the soil or its cultivation." Surely, now that the agriculture of this country is placed in open competition with the world, the antique covenants in farming agreements framed by the "old family lawyer," when rents were 100 per cent. below those of the present time, and when the practice of agriculture has changed equally with its appliances in implements, steam, and machinery, it is simply absurd to bind the farmer with the systems of the past. The largely increased charges upon farm cultivation during the past ten years, embracing rent, labour, tradesmen's bills, and the like, together with the ever increasing charges upon his holding in the shape of local taxation, are subjects claiming a practical inquiry with the view of an equitable adjustment to the altered circumstances of the times; and seeing that our agricultural returns indicate no increase of the tenant's capital in his cultivation, but rather the reverse, notwithstanding his greatly increased expenditure, it is clear that there is something radically amiss in our agricultural system. Agricultural questions, it has been said, are questions for the hustings, but they are above party, for they intimately concern the welfare and prosperity of the whole population.

I am, Sir, &c.,

HENRY NEILD.

The Grange, Worsley, April 3, 1879.

REDUCTION OF FARM RENTS.—In consequence of the low prices obtained for some time past for mostly all kinds of farm produce, together with the unusual backward state of the season, the farmers in several districts of Perthshire are organising themselves, with the view of asking their respective landlords for a reduction of rent. The tenantry on the extensive estates of the Baroness Willoughby de Eresby at Stobhall, Callander, and Drummond Castle are about to take action in the matter, and the farmers of Stobhall have already presented a memorial asking not only an abatement of rent, but that the rent days be changed from Whitnashday and Martinmas to Lammas and Candlemas, as being more suitable and convenient. In the county of Fife the grass parks this season are let at a great decrease as compared with previous years. The Wemyss Hall grass parks have been let this week at a reduction of 60 per cent. in comparison with last season.—*Scotsman*.

## EXPERIMENTS ON PLEURO-PNEUMONIA.

The following is the concluding report on the experiments at the Brown Institution on Pleuro-Pneumonia, by J. Bardon-Sanderson, M.D., LL.D., F.R.S., late Superintendent of the Brown Institution, extracted from the current number of the Royal Agricultural Society's *Journal* :—

The inquiries which were undertaken in 1876, relating to the origin and nature of pleuro-pneumonia, and to the use of inoculation as a means of preventing its spread, having now been brought to a conclusion for the present, in consequence of the legislative difficulties which stand in the way of further experiment, I beg leave to submit to the Council the following statement of the results of our labours.

The circumstances which led to the inquiry were set forth in a preliminary report which was published in 1876. At that time no experiments had been made, but our first batch of experimental animals had been purchased, viz., two cows, two calves, and four other animals of different ages. They had been kept at Wandsworth-road for three months—a time which we considered sufficient, but not more than sufficient, to afford security against previous infection. I then stated that we should exclude any living source of infection from our premises, but would “try, in succession, every channel of mediate contagion known to us, using in our experiments all that deliberation and caution which the consideration of the importance and difficulty of the inquiry enforced upon us.”

Before proceeding with the narrative of our experiments it will, I think, be useful to state somewhat more fully than has hitherto been done, the nature of the practical questions which we have had in view, some of which have now assumed a greater importance than they had at the outset. Our objects have been (1) to ascertain by experiment by what different ways a healthy animal can be infected; (2) to ascertain whether inoculation is practically useful; and (3) to discover a way of inoculating an animal without risk.

With reference to the first point, the opinion generally entertained is, that a healthy animal may get pleuro-pneumonia either directly from a diseased animal, or indirectly by being brought into relation with its hide or carcase, or with persons or things that have been in contact with its body. Thus, Mr. Fleming, the author of the well-known “Manual of Veterinary Sanitary Science,” expressed his belief very decidedly in 1876, that “infection may occur through the medium of forage, straw, &c., which have been soiled and breathed upon by infected cattle, by the utensils which have been used with them as well as by the persons who have attended to the sick;” and has since that period expressed the same opinion in still stronger terms. An opposite view had, however, been guardedly promulgated by a very high authority. In the excellent article by Professor Brown on the contagious and infectious diseases of animals, which appeared in the tenth volume of the *Journal*, the author said, that “so far as his own observations had enabled him to decide, the disease is only communicated by the actual contact of a diseased animal with a healthy one, and that it is at least exceedingly probable that the mode of communication is by the inhalation of the breath of the diseased subject.”

With reference to the second question, that of the utility of inoculation, opinions are also, as needs scarcely be said, much divided, although the majority are in its favour. One of the strongest arguments against it is founded on the acknowledged fact, that although inoculation as ordinarily practised produces very severe effects, yet these effects are neither the disease itself nor any modification of it. It has, indeed, been alleged by some authorities that actual lung disease can be generated by the insertion under the skin of bits of diseased lung; but this inference, which if it were well established would be of great importance, can be shown to be mistaken. The observations quoted in support of it are too good to be true. In most instances, the time which intervened between the inoculation and the appearance of lung disease was far too short; for we have evidence from the pathological inquiries of Professor Yeo, as well as from other sources, that the development of the disease in the lungs requires a very long time, and usually produces no obvious symptoms at all until it breaks out in the acute form in which it is ordinarily recognised. Consequently, the appearance of symptoms within a week or two after inoculation could not reasonably be referred to the opera-

tion as their cause; so that we need not hesitate to conclude that the animals in question had been previously infected by other means.

Another statement that has been made with reference to the mode of action of inoculation is equally unfounded, viz.: that although inoculation never produces actual pleuro-pneumonia, yet, that it gives rise, at the place where the morbid material is introduced beneath the skin, to a local disease which is of the same kind as the real disease of the lungs, and that consequently the effect of the inoculation is to produce a sort of pleuro-pneumonia of the skin! Now it is quite true that there is a great resemblance between them—a likeness sufficiently striking to have impressed some very well informed persons—but very little stress ought to be placed on it. All inflammatory exudations, whether specific or not, are very like each other as regards their chemical and anatomical characteristics; so much so that it is not possible to distinguish them from each other excepting by their disease-producing properties. In other words, the only way in which it would be possible to prove that any diseased material derived from the skin of the inoculated animal was pleuro-pneumonia would be by showing experimentally that when introduced into another animal it produced pleuro-pneumonia. If this proof were given we should have a right to conclude from analogy with similar cases, that in all probability immunity would be conferred on the infected animal; but in the absence of such proof, the only way in which the protective power of inoculation can be settled for practical purposes, is by observing whether inoculated animals can get pleuro-pneumonia by exposure.

The experiments which had previously been made for this purpose were unquestionably in favour of the protective power of inoculation. The inquiries of the French Commission, carried out in 1851, in which fifty-four animals were experimented upon at an expense of £2,400, led to the conclusion that “inoculation possesses a preservative power conferring on the inoculated animal an immunity which protects it from the contagion of the disease for a time which remained undetermined,” inasmuch as the experiments could not be continued for more than six months. This conclusion, founded on experiments which were evidently conducted with the utmost care and impartiality, has been largely confirmed by the trials which have been made of the practice by owners of stock in this and other countries, and particularly in our Australian colonies. It appears from a recent Government Report, that in the colony of New South Wales the practice of inoculation has been so successful as a preventive that it has become general; so much so, that the chief inspector of the colony was prepared in 1876, to recommend to the colonial government that it should be made compulsory.

But the proof of the protective power of inoculation, even if it were much stronger than it is, would afford an insufficient reason for recommending it as a practice, unless it can be shown that the third question—that which relates to the risk of the operation itself—admits of a satisfactory answer. On the ground of its danger the French Commission, notwithstanding their opinion as to its protective power, declined to recommend it as an economically advantageous practice; for they considered that their own experiments showed “that inoculation causes larger mortality than the disease which it is intended to prevent.” No less than 11 per cent. of their animals had died, whereas it was extremely improbable that so large a number would have been sacrificed had they been subjected without inoculation to the ordinary risks of infection. Notwithstanding these facts, the Commission, of which M. Bouley was the secretary, recommended that it ought to be encouraged on the ground that, its protective power having been demonstrated, the dangers above referred to would be diminished by improved methods.

Inoculation is usually performed by inserting the liquid which drains from diseased lungs into the cellular tissue. The situation chosen for the purpose is the end of the tail. The reason why this part is selected is, that if, as often happens, the local inflammation becomes excessive, it may be limited by amputation. But notwithstanding this safeguard, the diseased action is apt to spread to the neighbouring parts, in which case it occasions serious illness and often death.

The position of the question was therefore clear. The protective power of inoculation, though by no means definitively settled, had been rendered sufficiently probable to justify a more

extended trial than it had as yet received. But the effects of the operation as hitherto practised were sometimes so severe that it appeared probable that the risk would more than cover the advantage.

One of the first objects which we had in view in our experiments was to test the possibility of communicating pleuro-pneumonia by mediate contagion. The lungs of animals which had been slaughtered in an advanced state of the disease were placed, in the fresh state, under the noses of ten healthy animals of all ages. As none were infected, it did not seem necessary to repeat the trials in a systematic manner, the more so as the persons who attended on the animals were in the habit of handling the diseased organs which were at that time frequently brought to the Institution for pathological examination.

The experiments on inoculation were commenced in September in 1876. The first practical question which required an answer was whether it was possible by taking extra precautions in the collection of liquid, and particularly by using it only in an absolutely fresh state, to avoid the inflammatory results which have been above described. Five animals were inoculated with perfectly fresh material from a cow killed the same morning. A few drops of the clear exudation-liquid from the lungs were injected under the skin either of the shoulder or of the side of the neck. For five days the animals remained well; on the sixth day a swelling appeared at the puncture, which gradually increased. In three of the cases it began to subside a week after it had commenced, and eventually disappeared; but in the other two it went on increasing until it had involved the integument of the neck, chest, and belly, at length causing death by general infection, in the one case on the twelfth, in the other on the fifteenth day of the illness. It is to be noticed that the animals exhibited no loss of appetite, nor any other sign of general disturbance, until the third or fourth day after the swelling appeared, nor did the temperature begin to rise in any instance until that time. In the two fatal cases the highest temperature, four and a half degrees above the natural standard ( $106\frac{1}{2}$  Fahr.), was reached three days before death.

The mode of progress of the illness indicated very distinctly that, although we had not communicated pleuro-pneumonia by our inoculations, we had introduced an infection of another kind. If the liquid injected had been a mere irritant it would, if its action had been intense enough, have produced a limited abscess, not a rapidly-spreading and diffuse infiltration. That this was so was confirmed by the appearances observed after death. The internal organs, and in particular the lungs, were found to be perfectly healthy; but the serous membranes exhibited the appearances ordinarily observed in animals that have died of acute general infection, that is, from what is popularly called blood-poisoning.

In the cases I have related the effects of inoculation were, as has been seen, severe in every instance; for even in the three animals that recovered, the disturbance of health, as indicated by the high temperature and general state of the animal, was considerable. When the tail is selected as the seat of inoculation the case is much more manageable. Here, as before, it is not until the fourth or fifth day that the seat of puncture becomes painful and swollen. The swelling continues for about a week, by which time a slough of dead tissue has usually formed, which eventually separates. About the time that the slough comes away secondary swelling usually begins, and gradually extends to a greater or less distance towards the root of the tail, until, in unfavourable cases, the neighbouring integument is involved, becoming the seat of diffuse cellular infiltration of the same kind as that which has already been described. In the ordinary case, a common result of tail inoculation is that part of the organ separates by necrosis, an event which is often not attended with any serious disturbance of the animal's health.

There are two reasons why inoculation, as practised in the above instances, is necessarily attended with danger. One of these is that the liquid used, however carefully it is collected, not only contains the virus of pleuro-pneumonia, but possesses morbid properties of another kind, which are due to its being the product of an unhealthy, or, as it is often called, infective inflammation—properties which would have manifested themselves if, instead of the juice of a pleuro-pneumonia lung, we had used any other exudation-liquid of a similarly infective character. A second source of danger is, that the living tissue which serves as the channel of introduction is one which we know to be particularly susceptible to infective influences of

this kind. By previous experiments, relating to another inquiry, we had found that this second danger could be avoided by infusing the morbid liquid directly into the circulation. We therefore resolved to adopt this plan, feeling sure that, if the pleuro-pneumonia virus possessed any protective power at all, that power would be exercised to the greatest advantage if the liquid were mixed with the circulating blood; for in this way it would necessarily come into contact, not merely with any particular part, but with every organ in the body. Another advantage which the method of infusion into the bloodstream offered was, that from fifty to a hundred times the quantity of liquid could be introduced at once, and thus the chance of infection be vastly increased.

Fourteen animals were thus inoculated. The instrument employed was a syringe, capable of containing two drachms of virus, and furnished with a slender, sharp-pointed steel tube. The point was made to enter the principal vein by which blood returns from the back of the ear, and was usually secured by a ligature. The syringe was then slowly discharged, the greatest care being taken to avoid contact with the cellular tissue. It was often unnecessary to divide the skin. The whole operation was conducted without any appreciable suffering to the animal.

In the first batch of eight animals the operation was, in all but one, performed twice in each case, at an interval of several weeks, with a view to greater certainty of result. With the exception of a small prominence which marked the seat of the inoculation, and subsided in a few days, it was in general followed by no morbid effects, either local or constitutional. In one instance, however, that of an old cow, unfavourable symptoms presented themselves on the sixteenth day after the infusion. On that day the bodily temperature, which at the time had been natural and had until then continued so, rose to  $103\cdot2^{\circ}$  Fahr., and on the day following to  $105\cdot6^{\circ}$ . At this point it remained until the twenty-second day, after which it declined till death, which occurred two days later. The rise of temperature was attended with other signs of fever, and with difficult breathing, which continued to the last. The post-mortem examination revealed that the cause of death was an acute double pleurisy; but in addition to this there were appearances which showed that the animal, which was thirteen years old, had suffered from chronic lung disease of very old standing. This, although not the immediate, was the predisposing cause of death. The immediate cause was, I have no doubt, the infusion, which, acting on the pre-existing disease, occasioned consequences to which a healthy animal would not have been exposed. It is perhaps desirable to add that the affection of the pleura from which this animal suffered, although properly called a pleurisy, was of an entirely different kind from the pleurisy which forms part of pleuro-pneumonia. The sub-pleural tissue, which in the contagious disease is the principal seat of alteration, was in this animal entirely unaffected; nor were any of those characteristic changes in the lung tissue observed which have been so well described by Mr. Yeo in this Journal. We are therefore justified in concluding that, whatever may have been its antecedents, it was free from pleuro-pneumonia during the time that it was under observation.

The remaining seven animals were, as has been already reported to the Society, exposed to the infection of pleuro-pneumonia in the most effectual manner that could be devised. They were removed from the Brown Institution, and placed in sheds which were at the time occupied by diseased animals, and in stalls in which such animals had stood. They remained under these conditions for three months, and in some instances for four, after which they were kept under observation for periods which in the majority of the cases extended to six months. None of them showed any signs of infection. In those that were slaughtered the lungs and other internal organs were found to be perfectly healthy.

The other six animals were inoculated early in the present year; but in consequence, first of our being unable to meet with cases of pleuro-pneumonia in situations convenient for our purpose, and subsequently of the obstacles imposed by legislation, all attempts to test the immunity of these animals in an effectual manner proved unavailing; and I found myself obliged to recommend to the Committee that they should be sold.

The results of the experiments have been so far satisfactory that I cannot help regretting that they have been brought to an abrupt termination. The smallness of the number of the

animals which we have had the opportunity of experimenting on renders it impossible to regard them as conclusive. The utmost that can be said is that, so far as they have gone, the results are sufficiently favourable to justify us in recommending further trial of the practice of venous infusion to those who are unlucky enough to have their herds invaded by pleuropneumonia. As regards the safety of the operation itself, I can speak with confidence. Provided that an operator can be found with sufficient dexterity to perform it, and sufficient conscientiousness to avoid the known sources of danger, the trial can be made without risk. Certainty as to its value can only be attained by the experience of some years.

I cannot conclude this report without pointing out that, in case the value of inoculation should be established, there is no reason why the measures of sanitary police which have been enforced by the Legislature should interfere with its useful employment. It has been distinctly recognised as the basis of this legislation that pleuro-pneumonia is a disease of extremely long incubation—i.e. one which may exist and progress in the organism for months without producing obvious symptoms; and that it is chiefly communicable by actual co-habitation. The recognition of these two facts has been embodied in the principle of *prolonged segregation of all animals that have been exposed to intercourse with living sources of contagion*. If it is found possible to carry out this principle effectually throughout the United Kingdom, it may be confidently anticipated that the prevalence of pleuro-pneumonia will gradually diminish until, as may be hoped, it may eventually disappear. The realisation of this desirable result would, no doubt, tend to diminish the importance of the question of inoculation. So long, however, as outbreaks of pleuro-pneumonia still exist, the limitation of its areas of prevalence by restrictive regulations would, in my judgment, materially facilitate the application, within the areas so limited, of whatever other means of prevention might be found to be effectual for the diminution of the number of animals attacked.

### A BILL OF SALE.

The *Sherborne Journal* reports at length a local case of great interest which was recently contested in the Queen's Bench Division. The parties to the suit were Cochrane v Collard and others. The following is an abstract of our contemporary's report:—

This was an action by the holder of a bill of sale to recover the value of certain farming stock and other matters, to which he claimed to be entitled under it, and which had afterwards come into the possession of the various defendants. The plaintiff, Mr. Alexander Sargent Cochrane, carried on business under the style of the National Deposit Bank, of London. The defendant Collard is a farmer at Henstridge, in Somersetshire, and most of the other defendants are farmers and butchers in Dorsetshire. The plaintiff was the holder of a bill of sale dated January 21, 1878, from a farmer named Sampson, under which the latter had assigned to him, in consideration of a sum of £1,000, all his furniture, farming stock, crops, agricultural implements, &c. Sampson was to pay £1,500 in instalments extending over some two years, and another condition was that he was not to sell anything without the written consent of the plaintiff. As a fact he did sell off everything in March to the defendants, who, it was admitted, had paid a fair price for what they had had. The plaintiff claimed that by a breach of the condition of the bill of sale the property in the goods of Sampson had passed to him, and he now sought to recover their value from the several defendants. It appeared that on learning what Sampson had done he had gone down to Dorsetshire and had represented himself to the defendants to be a Mr. Henry, who was jointly liable with Sampson for the £1,500 advanced by the National Deposit Bank. This he described as a money-lending business in London. In this way he had ascertained from the defendants themselves, precisely which of Sampson's goods they had bought, and he afterwards sent clerks down to get further information. On bringing this action, he had used these admissions in the interrogatories administered to the defendants. In cross-examination, he admitted that in January, 1878, he was the sole proprietor of the National Deposit Bank, of which he stated he was now only the managing director. The plaintiff's counsel having put in the interrogatories and the

answers to them, the defendants did not call any witness. As to one of the latter, a brother of the farmer who gave the bill of sale, it was urged that he did not buy anything, but only acted as his brother's agent for sale in the matter; and when this was left to the jury they found that this had been the case. But the main question was whether or not the goods afterwards sold by Sampson to the defendants were on the 21st of January, 1878, on his farm at Long Barton. There had been no schedule or inventory attached to the bill of sale, which, however, as very comprehensive in its terms, and was made to include any and everything that was or might in future be on or about the farm, premises, &c. A clerk of the plaintiff had made a list of the things there just before the execution of the bill of sale, and the plaintiff swore he had checked it a few days afterwards. His lordship, in summing up, said it was the hardest case he had ever known, but that the jury must disregard the attacks made on the plaintiff by the defendants' counsel, and consider only whether the evidence satisfied them or not that the goods purchased of Sampson by the defendants were on the farm at Long Barton at the date of the execution of the bill of sale. The jury, after considering their verdict for half-an-hour, found for the plaintiff; and thereupon, his lordship said that, as some points had been raised which were questions of law only, he would reserve the case for further consideration.

### BEDFORDSHIRE STALLION SHOW.

The annual show of stallions, in connection with the local Agricultural Society, took place on April 5th in the paddock adjoining the Cattle Market. There was a large attendance of farmers, horse dealers, and others. The number of entries was in excess of last year by two or three, and the exhibition was pronounced both in that respect, and in respect of the merits of the animals, an improvement on its predecessor. The prize winners will, according to the stipulations under which the awards were given, be shown again at the Society's general show. In addition to the animals entered for competition, Mr. T. W. Grant (Lungford), Mr. Field (Stratton), and Mr. T. A. Macan (Elstow), sent in thoroughbreds as extra stock, and these formed a centre of a great deal of attention. The winners of prizes were Mr. John Bosworth, Marston, Baron Lincoln, 6 years old, first; Mr. Geo. Horn, junr., Kempston, Young Champion, 10 years, second; and Mr. Geo. Street, Maulden, Young B'dford, 3 years, highly commended. The other exhibitors were Mr. Geo. Horn, senr., Claphill, Challenger, 5 years; Mrs. Street, Cople, 3 years; Mr. John Seapriest, Lanark, 3 years, an animal 2 years; Mr. K. Ross, Thurling, Le Bon, 4 years; Mr. Thos. Stokes, Coldcott, Rutland, Young Drayman, 6 years and 10 months; Messrs. Howard, Clapham, Columbus, 13 years; Mr. David Fuller, Northill, Young Cov, 7 years; Mr. Robt. Pell, Higham Ferrers (Oringbury), Foundation, 3 years; Mr. T. Goff, Harrold Park, Young Champion, 7 years; Mr. John Bandy, Clapham, Young Waxworth, 7 years. The judges of the show were Mr. Swarder, Willan, and Mr. Thos. Turvell Irchester.—*Beds Times*.

HAVE WE FORGOTTEN LIEBIG—that giant of mental capacity, whose discoveries and the theories deduced from them have formed an imperishable basis for all agriculture everywhere and in all times? How many and second-rate must appear, to any one who studied and appreciated that great man's works, the simple practical illustrations and confirmations of his theories and dictums, and yet these were for a long time disbelieved and opposed but never confuted by proof of error! His mineral theory is riding now triumphant over error and prejudice, and we have at last learned the great lesson which he tried to teach us—that where the incombustible elements of plants are wanting in the soil, there can be no fertility of crop. Phosphate of lime and potash are now accepted as essential bases, while straw and chaff have gone to the winds, which contain the free ammonia that was for the first time only discovered there by Liebig. Is it not time—if not it never will be—when a monument shall record the immeasurable benefits which he has conferred on mankind? One rises from a profound study of his great works with a conviction that he has left little more to be done in the matter on the "Natural Laws of Husbandry"—the title of his last great work.—J. J. Mearns, Tiptree.



# Farmers' Clubs.

## CENTRAL.

The usual monthly meeting of the Farmers' Club took place on Monday, 7th ult, at the Club Rooms, Inns of Court Hotel, Mr. P. Phipps, M.P., in the chair. The attendance was numerous. Professor Wrightson, of Chardford House, Downton, Salisbury, introduced the subject for discussion, namely, "The Law of Distress for Rent as it affects the Farmer."

The CHAIRMAN, in opening the proceedings, said that since the last meeting the Committee had considered the question then raised respecting the passing of resolutions, and they had decided that no resolution should be passed; adding that they had also made a bye-law to the effect that no one except the reader of the paper should occupy more than a quarter of an hour in discussions.

Professor WRIGHTSON then read the following paper

In introducing this very difficult and complicated question before you I must ask your indulgence. My own inclinations have been somewhat sacrificed to the wishes of the Committee of the Club, as they would certainly have pointed in the direction of a subject more congenial to the pursuits of my past life. Not being a lawyer I have found it exceedingly difficult to treat this subject in a manner thoroughly satisfactory to myself; although, at the same time, I am ready to allow that a simply legal view of the case is not precisely what is required. I have noticed that lawyers are apt to argue as though changes were impossible. A layman on the other hand is, it may be, too rash in holding that if legal machinery will not lend itself kindly to reform, it must be made to do so by the requisite amount of remodelling. Lawyers are seldom the advocates for legal reform, but being practical men they take things as they are, and leave reformation to others. On these considerations I am ready to allow that although the law of distress is pre-eminently a legal question, there may be some advantage in its being treated by an agriculturist from his own point of view.

In considering the subject it may be necessary in the first place to refresh the memories of gentlemen as to the present state of the law of distress, so far as it is a means for the recovery of rent.

Leaving out of consideration the impounding of straying animals; the powers of distraint for penal sums on demised lands; distress levied for the arrears of annuities, rates, taxes, and tithes, all of which really form part of the law of distress, I propose to confine myself entirely within the limits of distress for agricultural rent.

The general principle of distress is not that of direct confiscation. The distrained goods are, it is true, in the hands of the person empowered to seize them. But they are only held by him as a pledge to compel the redress of an injury, the performance of a duty, or the satisfaction of a demand.

The privilege is very ancient and extends back to feudal times, when it was probably used as a means of compelling military or feudal service. After the Norman Conquest it was freely used by the great feudatories of the Crown, and became in their hands a means of oppression. The goods in those early times were not allowed to be sold, but were merely held as a pledge until satisfaction was made; and it was not until the reigns of William and Mary that a statute conferred the right upon the landlord of selling the goods for the satisfaction of his claim. So far as the modern tenant farmer is the representative of the ancient vassal, and the modern landlord the representative of the ancient feudatory of the Crown, we may be able to trace in the modern law of distraint a remnant of the high-handed proceedings of the conquerors of Saxon England. But, for my own part, allowing that the right has continued to exist, with modifications, from these early times, I cannot see any resemblance between the position of the modern tenant farmer and an irremovable vassal of a Norman knight, who, indeed, is more in the position of a copyholder of the present day.

The law appears to have originated in a very natural instinct of the uncivilized or half-civilized man. It is decidedly

opposed to the ordinary course of law, which will not allow one man to seize upon the goods of another for the satisfaction of a debt. It is, in fact, a preferential law or privilege, which has been retained, rather than conferred, upon landlords, and which no doubt points backwards into what are called the dark ages. In saying this I do not wish to infer that the law is bad, or even requires alteration, because it can be traced back to feudal times.

The landlord's right to distraint for rent was limited by the Real Property Limitation Act (1874) to the recovery of six years' rent next after the same had become due; and no distress can be made after twelve years have elapsed without claiming the same. In the case of bankrupt tenants the law of distress can only be put in force for one year's rent, after which the landlord shares with the other creditors. At one time possession of the farming stock by the sheriff prevented the landlord from distraining for rent; but an Act passed in the reign of Queen Anne provided that the landlord should first be paid one year's rent.

The distress must be levied between sunrise and sunset, and must be made upon the land liable for the rent. When there are several tenancies, rented separately, separate distresses must be made upon each for the several rents due. "If the tenant fraudulently and clandestinely removes from the premises goods after rent has become due, the landlord can follow and take possession of such goods, wherever they may be; but if such goods have been bona fide sold to a person ignorant of the fraudulent transaction, the landlord's power over them ceases." Certain classes of property are protected from distress, such as fixtures, which cannot be removed without damaging the premises; goods of third persons, under certain limitations, which, however, scarcely apply to agricultural tenancies; things actually in the hands of the debtor, which he is at the time using; goods left at an inn, under certain limitations; goods in the custody of the law. On the other hand, distress may be levied upon the property of strangers unless the landlord has waived his claim by previous agreement. It is this extraordinary privilege of the landlord which has probably, more than any other, caused the present agitation for the repeal of the entire law.

I have now explained (I hope sufficiently for the present purpose) the leading features of the law of distress. So much has recently been written upon the actual state of the law, that it seems to me best to pass on to consider how far it is injurious or beneficial to the landlord, the tenant, or the commonwealth. With respect to the power possessed by the landlord over the property of third persons, I fully expect the Club will come to an unanimous decision that such power requires to be regulated and controlled by an alteration of the present law. It has been urged in defence of this part of the law of distress that if the landlord were debarred from seizing the property of strangers which at the time of the distress happened to be upon the land, a door would be open to obvious fraud. A man might transfer his stock to a third person. He might sell all his corn and stock and let his feed to his neighbours. But, although such fraudulent transactions might occur if the landlord's rights over the goods of strangers upon the premises were abrogated, it does not follow that a saving clause might not be inserted which might prevent a tenant from so acting. The landlord's permission in writing would, or ought to be, sufficient to enable a man to safely entrust his stock upon the land of a tenant without rendering it liable to seizure upon the bad principle illustrated in the now famous case of *Dupper v. Lake*. This is a point which I hope will be discussed, for the law at the present time cannot be looked upon as just. At present, steam ploughs engaged in the cultivation of fields are liable to be seized for rent; sheep out at keep; stock resting on their way to fair; a yard of bullocks bought and paid for, but left a day or two for convenience; growing crops purchased on the ground, but not ready for harvest; are all liable to be distrained, although the property of persons who are not in any shape whatever liable for rent.

I cannot but look upon this phase of the law as absolutely unjust. If it is necessary that it should continue to form a part of the law it is sufficient to entirely condemn the privileges of landlords to levy distress for rent. If it is true that the abrogation of this part of the law of distress would open the door to fraud on the part of tenants, is it not equally true that its retention renders it easy for a landlord and

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tenant in difficulties to conspire together to entrap a third person to send valuable stock on to the premises with the express intention of distraining it for rent?

We now come to the discussion of the most important part of our subject, namely, whether or not the present law of distress should be repealed, or whether the period during which it may be exercised should be shortened. That the law of distress has certain unfair and like unbusinesslike aspects cannot be denied. It, however, forms a leading feature in the relations of landlords and tenants, both rural and urban, and its complete repeal would undoubtedly be followed by grave consequences. For my own part I should have thought that an agitation for its absolute repeal would have sprung up more naturally from outside the ranks of agriculturists. Manure and implement manufacturers and tradesmen might naturally be expected to disapprove of the preferential claims of the landlord. Judging the question upon its own merits it seems manifestly unfair that a landlord should be able to allow a tenant to pay no rent for six years, and then to clear him out and leave, as in a recorded case, £d. in the £1 for the remaining creditors. We are no doubt called upon to discuss this question upon its merits and not upon any class view. Still it is in some respect singular that the Farmers' Club should entertain the wish to probe and lay bare a subject which they might, from motives of self-interest, have left to the criticisms of those classes likely to suffer directly from its operation. I am not aware that Chambers of Commerce have agitated the repeal of this law, and yet commercial men are in the most danger of suffering from collusion between a landlord and his tenant. The subject has received considerable attention from Chambers of Agriculture during the winter, and a great diversity of opinion has been expressed. Those who are in favour of the complete abolition of the law lay great stress upon the injustice to other creditors besides the landlord. They consider that the farmer loses credit on account of this power of the landowner. They also accuse the existing law of unduly fostering competition of farms by men of insufficient means, and thus raising rents to an artificial level. A fourth grave objection—the liability of agistment stock—has been already referred to as manifestly requiring amendment. For my own part I cannot bring myself to agree with the advocates for repeal. For many years the hindrances to agricultural development have occupied our attention, but as one of those hindrances I do not remember that the law of distress was ever prominently brought forward. The six years during which the right of distress may at present be exercised ought to be reduced to one, or at most two, years, simply because, as the law now stands, an undue preponderance is given to the landlord as a creditor, and this tends to render him careless as to the means of his tenant. On the other hand, a certain amount of preference is required for the protection of landlords, and if it is not accorded by law it will be manufactured by lawyers. Rents paid in advance or a lien in some form upon the stock and crop would give the landlord the security—now accorded by the law of distress—or in some cases he might be disposed to retain the land in his own hands. We may rest assured that before a landlord would give up possession of a valuable farm to a tenant that he would in some form or other make the rent reasonably secure. The relationships of landlord and tenant are so much akin to partnership and are so peculiar that you cannot class them with the relationships of ordinary creditors. Rent represents a certain share of produce of the land, paid in money it may be, but nevertheless a portion of the produce of the farm. The law of distress recognises the peculiarity of rent, and allows the landlord to re-enter and take the goods of a defaulting tenant. The peculiar nature of rent is certainly not recognised by those who wish to place the landlord exactly in the same position as other creditors. It is often asserted by those who take the opposite view, and it will be my object to endeavour to render it clear. I do not mean to introduce any philosophical arguments to prove the alleged superiority of the landlord's claim. I only maintain that it exists, and exists by reason of land being a monopoly. "It is more evident," writes the late John Stuart Mill, "that rent is the effect of a monopoly; though the monopoly is a natural one, which may be regulated, which may even be held as a trust for the community generally, but which cannot be prevented from existing. The reason why landowners are able to require rent for their land is that it is a commodity which

many want, and which no one can obtain but from them. If all the land in the country belonged to one person, he could fix the rent at his pleasure. The whole people would be dependent upon his will for the necessities of life, and he might make what conditions he choose. This is the actual state of things in those Oriental kingdoms in which the land is considered the property of the State. Rent is then conformed with taxation, and the despot may exact the utmost which the unfortunate cultivators have to give. Indeed the exclusive possessor of the land of a country could not well be other than despot of it."

Rent is the first condition upon which a man can be a farmer. It is entirely and only with the consent of the landlord that he can farm at all, for it is at the option of the landlord to occupy the land himself. This line of argument has no parallel with the case of manufacturers. A manufacturer must sell what he produces or cease to exist. A landlord occupying his own land must also sell his produce, but there is no reason why he should give up possession of the land itself unless he is perfectly satisfied with the conditions upon which he resigns it. If you sweep away the protection now allowed by the law of distress the landlords can readily secure themselves by proper arrangements with tenants, which, while legally good, will be private, and therefore more objectionable than the action of the law of distress.

I shall be met here with the answer—that landlord farming is not usually profitable, and land that lords are too much alive to their own interests to engage extensively in farming. But let us remember that the case might be very different if the law of distress for rent were repealed. According to the showing of the most active supporters of repeal a very considerable number of tenant farmers would be unable to carry on their businesses if they did not enjoy credit from their landlords for back rent. The abolition of distress, we are told, would rid substantial men from the competition of "men of straw." This it is argued would lower rents, and no doubt the first tendency would be in this direction. A little reflection will, however, show that the moment rents begin to fall, while, at the same time, owing to the nature of the case, the perfect security for rent now secured by law was removed landlords might think very differently of farming, and the, might, and doubtless would, occupy many farms themselves. Thus, while you diminished the number of farmers, you would also diminish the number of farms to let. We all know that there is a large class of our most skilful farmers who owe much to the forbearance of their landlords. I should imagine that there never was a time in which this forbearance was more welcome than the present. Would not the consequences to this numerous class be most disastrous if the present security enjoyed by their landlords towards them were violently removed?

If the law of distress were abrogated, no doubt hundreds of struggling tenants would go to the wall. But their wealthy brethren watch for this result with undisguised satisfaction; as if surviving children should be glad of the death of their brothers and sisters because they should have a larger share. But this selfish view might prove unsound. Just as surely as many hundreds of farmers would be unable to carry on their business if their rent were rigidly called up, so surely would there be a difficulty in finding tenants for hundreds of farms. These farms would pass into the hands of their owners, and the competition for the remainder would be as severe as ever, while, at the same time, the landlord would take means to secure his rent by methods which would take the gilt off any apparent concession which might be made with regard to actual price per acre. Sir, if the law of distress were entirely abrogated, and if a consequence was the lowering of rents, it would not follow that such reduction would benefit the farmers. They who under the present law rent somewhat higher in consequence of it, receive a *quid pro quo* in credit, which may amount to a continuous loan, free of interest, of several hundreds of pounds. Take away the landlord's security afforded by distress, and the tenant at once will require to bring more capital into the field, for which he may have to pay his bank 5 per cent. As I have already pointed out, I think it doubtful if rents would fall upon the repealing of distress. It seems to me unnatural and unlikely that you should be able at one blow to destroy security and at the same time lower the rate of interest (rent). Usually, the safer the investment the lower the rate of interest.

rent, but in this case it is desired to render the investment less safe and lower the rate of interest (rent) by one and the same means.

If it is so very desirable to put other creditors on a level with the landowners, why do not the other creditors come here in overwhelming numbers and say so? If it is merely a cry got up to lower rents, by the wholesale destruction of struggling farmers; to deprive landlords of their security for rent while at the same time their property is depreciated, I say it is not only unworthy of the notice of agriculturists of position, but likely to frustrate its own ends. It is a blow aimed at landlords and tenants at the same moment, at a time when I should think tenants could least afford to lose the indulgence of the landlords, and landlords could least afford to lose the confidence of their tenants.

I have endeavoured to establish the principle that the landlord cannot be debarred from the exercise of his superior position as a creditor, any more than a mortgagee could be made to forego his rights. I have shown that by virtue of his powers as owner he can always exact security for his rent as surely as a banker can ask a security or guarantee for money lent. Also that it is preferable that this security should be held through a recognised and ancient law well known to every one, rather than that it should be held by means of private liens upon a tenant's stock and crops. I have arrived at the conclusion that no considerable advantage would follow the repeal of this law, while a great amount of real distress would undoubtedly be the consequence. Also I have given my reasons for thinking that the value of land, although likely to be lowered by the shaking of its value as an investment would, so far as rent is concerned, probably be much less affected than has been held by some persons.

I will address myself next to the question of limitation.

There is a limit to everything, and it does not follow that because a principle is approved it should be allowed to run riot. Rent is a yearly liability, although it may be collected quarterly or half-yearly. Rent is, I take it, a share in the produce of the soil, but a rent due years ago is a debt which must be paid out of the trading capital of the tenant. If, owing to bad seasons or low prices, a farmer is unable to pay rent, it might be argued that the land has not produced rent at all, but only paid for the necessary costs of its cultivation. If a landlord distrains for rent due six years since, he evidently does not seize upon the produce upon which that rent is due, for that produce was sold or consumed years since. If the law is stringent that a distress should be levied upon the land where the rent is due, and upon no other, it should, I submit, be equally stringent that the distress should be levied upon the stock and crop which owe the rent. Why should the law be so very nice as to where the distress is levied, and be less exact as to when the distress is levied. It must be upon the land from which the rent arises, and "where there are separate tenancies in several premises, at distinct rents, separate distresses should be made, for no distress on one part can be good for both rents." Now, if we substitute "crop and stock" for "land," and make it illegal to distrain except upon the stock and crop from which the rent is due, landlords would be unable to distrain growing crops and a large proportion of the stock for a debt six years old. The matter might be still more simply arranged by limiting the powers of a landlord to a distress for one, two, or three years' rent, but certainly not for a longer period. It appears culpably negligent for a landlord to allow his tenant to run on for years without paying rent, and then to swoop down upon him and take his whole effects. This is manifestly repugnant to common sense and common justice, and might be almost regarded as a conspiracy for the purpose of defrauding the creditors.

The advantage of limiting the landlord's right to one year is that the ordinary law would be assimilated to the Bankruptcy Act. A year is, however, too short a time to give the landlord a fair security, and to enable him to treat a tenant with due consideration. Two years' rents would better meet the case, not because there is any particular virtue in limiting the distress to two years, but because it seems to be a reasonable compromise, giving the landlord time for consideration, the tenant a better time for surmounting temporary losses, while at the same time, on ordinarily well-stocked farms, there would be a fair amount of property left for the satisfaction of other claims.

In advocating the modification rather than the repeal of the Law of Distress, I may be told that the abolition of Hypothec in Scotland is sure to be followed by the repeal of the equivalent law in England.

Certainly there is a great similarity between Hypothec and Distress, and I notice that Mr. Charles Sewell Read went so far in the debate in the House of Commons, to confess a preference for the Scotch law, as more open and less underhand than the English law.

I hardly expect that we shall discuss the Law of Hypothec this evening. Everyone knows that the Scottish agricultural press has loudly demanded its repeal for the last twenty years to my own knowledge. Its destruction has been the bond of union between agriculturists, the banner around which chambers, clubs, and the press have fought, and it has formed a test question in all Parliamentary elections. This has not been the case in England with regard to our Law of Distress.

Of late years many papers have been read upon the hindrances to the development of English agriculture. I find the following headings to be generally adopted:—(1.) Insecurity of tenure. (2.) Absence of a just and equitable system of tenant-right. (3.) Illogical and restrictive covenants. (4.) Undue burdens upon land. (5.) Over-preservation of game and rabbits. (6.) The laws of primogeniture, entail, and strict settlement. To these the Law of Distress may in some cases have been added, but, as far as I remember, it has never formed a prominent subject of complaint.

Although speaking under correction, I submit that the Scotch Law of Hypothec became obnoxious to almost the entire mass of Scotch farmers on account of the extraordinary powers it conferred upon landlords to follow and to take possession of produce after its bond fide sale, and even after it had been transformed by the processes of manufacturers. It also empowers the landlord to seize the property of the tenant before the rent is due, and appears to rest upon the untenable principle that the tenant really possesses no absolute right to the produce of his fields, and that the landlord might insist upon his tenant's asking leave to sell his grain and fat stock.

If a miller knew that after he had bought and paid for wheat, carried it home, and ground it into meal, that the owner of the land upon which that wheat grew might seize the meal, might it not deter him from purchasing wheat from farmers? Would it not tend to lower the value of wheat, and destroy the credit of farmers? I can only account for the comparative indifference with which this law is viewed in England as compared with Scotland to the less vexatious manner in which it exists south of the Tweed. There is something evidently unmanly in the position a Scotch tenant under the Law of Hypothec. It is a law framed for serfs, and must have always been a sore subject with the high-spirited tenantry of the Lothians. It is possible that the Law of Distress may be doomed to disappear from the statute book, but I do not think it will be hurried from its pages with the hootings and execrations which have accompanied the agitation against Hypothec. On the contrary, there is something which commands itself to the common sense of most people, that if rent is overdue the landlord may step in and insist on payment. This may be unfair to other creditors, but this consideration is scarcely likely to raise a hearty cry for repeal from the farming community. I now leave the subject in the hands of the Club. I have not the slightest notion as to whether the sense of this important meeting will support me in the moderate opinions I have expressed, or whether it will be more in favour of a policy of "Down with it, down with it, even to the ground." I cannot but think that the result of your deliberations will be waited for with interest, even by legislators; for the expression of opinion on such a subject by the Farmers' Club must be especially significant at the present time, just after the Hypothec Abolition Bill has passed through the House of Commons.

Mr. JAMES HOWARD (Bedford) said he was sorry he could not concur in the conclusions arrived at by Professor Wrightson, who stated that he had come to the conclusion that the abolition of the Law of Distress would prove injurious to the interests of the farmer. It had always appeared to him that the Law of Distress was most prejudicial to the tenant farmer, but it was one of those laws that worked in such a quiet unobtrusive manner, that its operation and effects were not apparent. If it were as apparent as it had been potent, there would have been just as loud an outcry against it in this country as there had been

against the sister law of Hypothec in the sister country. He had said that the law was subtle in its operation. Let them take an illustration. Professor Wrightson had introduced the bankers two or three times in his paper. He also would take the case of the banker. A tenant resorts to a banker for an advance to tide him over a crisis. Of course nothing is said by the banker or bank manager at the interview about the ugly question of the Law of Distress, and it probably never once crosses the mind of the would-be borrower. But is anyone simple enough to suppose that it is absent from the mind of the banker when he very blandly informs him that he can be accommodated with the advance, only, he adds, reliable security will be expected. Take another case. Let them say that Mr. B is the owner of a considerable estate on which a farm falls vacant. There are a good many men applying to become tenants, and competition for it becomes brisk. The landlord, protected by this Law of Distress, feels that the man with only capital enough to half stock the farm is just as safe to pay the rent as the man who has capital to fully stock it. The farm is let, and probably at a considerable advance on the previous rental. Very soon after Mr. B meets his neighbour Lord A, and informs him that what he is pleased to call a very eligible tenant has taken the Holt at thirty-five shillings an acre. Not long after Lord A meets his agent, and calls his attention to the fact that this farm of the Holt is let at ten shillings an acre more than his neighbouring farm the Grange, where the land is just as good. In process of time, if not immediately, the rent of the Grange farm is raised, and perhaps that of a dozen other farms on the estate are also advanced, and not one of those tenants ever dreams that it is directly or indirectly in consequence of the existence of the Law of Distress. It might be said that he had drawn a fancy picture (No, no). If it were a fancy picture, it was not far from being a real one, and he believed that hundreds of such cases had happened, and probably thousands. But there was no necessity to draw an imaginary picture to portray the evils of the Law of Distress. It was one of those hard laws of political economy which could not be ignored that any law or any set of circumstances that brought more competitors into the market for a commodity raised the value or increased the price of such commodity, and seeing that the Law of Distress did increase the number of competitors for land, it was evident that it must have had a silent but potent effect in raising the rentals of farms throughout England. This Law of Distress had been handed down to them as a legacy from feudal times, and had been quietly acquiesced in up to the present, men were now only just beginning to inquire into the justice or injustice of it; and if it had nothing but its antiquity to recommend it, its doom was sealed. He would take another view of the matter. Professor Wrightson had referred more than once to the bankers. He also would go back to the question of the banker again, and would here borrow an idea from a very trenchant pamphlet, written by a very esteemed and excellent friend of his, Mr. McNeel Caird, brother of Mr. James Caird, and which had been circulated recently by the Scottish Chamber of Agriculture. Suppose that the bankers of England had a preferential right over every other creditor, including the landlord, did anyone believe that such a law would stand for a single session—clearly not. And if not the banker why the landlord? (Hear, hear). The landlords were the richest and most powerful class in the community, and therefore stood less in need of state protection than any other. Would it be believed for one moment that if the Law of Distress had never been in existence, and was now introduced for the first time, it would meet with favour from any class of the community? Why, it would not stand the ghost of a chance of passing either branch of the Legislature. It would be deemed, and would be denounced throughout the land as, a piece of unjustifiable class legislation of the very worst kind, and the bankers and trading classes would be up in arms against its unfairness. He wished to call attention to one point, and that was that if the landlord lost his rent he only lost the interest on his capital, but if a trader or a banker lost a debt he lost both principal and interest. We had over and again heard statements as to the beneficial effect this law had in the case of poor struggling farmers, but the argument was a fallacious one; in the first place the liberal and indulgent landlord would not by the repeal of the law be turned into a harsh and rapacious one; again, the struggling farmers were the very class whose credit the law of distress undermined.

The law did not impair the credit of the wealthy, the opulent farmer, but undermined and destroyed the credit of the very class on whose behalf its action was claimed to be beneficial. But even if the argument held good that it was any benefit to the struggling farmer it would fall to the ground if it could be shown that its operation was injurious to the country; and he did not know of anything which could be more injurious to the best interests of the country than keeping the hand out of the hands of men who were in a position to fully develop its resources and letting it to men who had not sufficient capital to work it properly. Again it was argued that the landlord, in respect of his rent, did not enjoy so advantageous a position as the trader or other creditor, inasmuch as he could not sue for his rent until it became due. This argument had been used by no less a distinguished man than Professor Willis Bund. Now he had been in business for a good many years, and had yet to learn that he could sue for a debt before it became due (loud laughter). It was evident, as regarded that point, that no argument could be sustained showing that the landlord did not hold as favourable a position as the trader. This law had been quietly acquiesced in up to the present, but unless he was mistaken as to the signs of the times, it would not be in the future as it had been in the past. The times were changed, and circumstances were changing, and it was becoming evident that the farmers of England were resolved that they would not any longer remain the political nonentities they had been, but would make their voices heard in the great council of the nation.

Mr. B. HOBBS (Vineet, Margate) said that it was a question which had for some time past occupied a good deal of the thought and time of the agriculturists of Kent, and it had been brought under their notice in a manner which had led them, very naturally, to take considerable interest in the discussions which had taken place in their own county and elsewhere. He was very glad indeed to hear Mr. Howard speak so strongly against the conclusions at which Professor Wrightson had arrived, as appeared from his paper; but he was still unable to go the full length of the total abolition of the law. Mr. Howard had made a very strong point by his remark that if such a law did not exist it would not now be established. It must be clear to every one that there would not be the ghost of a chance of the enactment of such a law if it did not already stand in the Statute Book; but he apprehended that in considering the matter they should carefully take into account existing circumstances. Probably there were many other laws in this country besides the Law of Distress which would not be enacted if they did not exist, but which were retained because they were part and parcel of the law of the country and of our social system. As a tenant farmer and a small landowner he felt that a great disturbance of the existing relations of landlord and tenant would occur if there were a total abolition of the preferential claim of the landlord. He was rather in favour of a reduction of the period to one year, and of the exemption of the stock of other persons which happened bona fide to be on the land from seizure for rent. He thought such alterations, at all events at first, would be safer and more beneficial than the total abolition of the present law of distress. It should be remembered that a great many landlords had not benefited by the present state of the law, landlords generally being of a forbearing character, and desiring to treat a reasonable and deserving tenant with leniency. Men of a kind and generous disposition being now disposed to give assistance to deserving tenants, would be equally disposed to do so if the law were entirely abolished; and he was quite sure that the reduction of the time of preference would not greatly effect the position of men who would be brought into the Court of Bankruptcy before the total expiration of the generosity of the landlord. He would urge them to insist on a change of the law, which would reduce or curtail the extraordinary powers of the landlord—powers which did not, generally speaking, confer an advantage upon a considerate landlord, inasmuch as such a landlord did not avail himself of the law as it existed, the only men who availed themselves of it being landlords whose proceedings he would not characterise by words, but which were characterised by their conduct (Hear, hear). The present state of the law placed most serious obstacles in the way of business arrangements. In his own county a great many occupiers of land were in the habit of selling their hay and other produce of that kind, and when the time came for removal to London there were

often great difficulties in the purchasers getting possession of the haystacks and so on for which they bargained. The consequence was that the course of business was greatly interrupted, and at a time when it was necessary that produce should be reduced into cash in order that engagements might be met, men were in that may pushed, as it were, into a Bankruptcy Court. He knew that in some cases considerable loss had been incurred by London buyers, and when one of them had appealed to the landlord he had perhaps met him by saying that he was surprised that he should pay a farmer for anything before he had taken it away. Although he was not one of those who would go the full length of advocating the abolition of the Law of Distress, he was in favour of their using every effort in their power to get the extreme rights of the landlord reduced, so that he would no longer be able to distrain for six years' rent. He was certainly of opinion that the existing law was not so entirely in favour of the tenant farmer as Professor Wrightson appeared to think (Hear, hear).

Mr. W. BROWN (Tring) said that as a land-agent he had great satisfaction in being able in some measure to endorse what Mr. Howard had said, but he could more particularly endorse what had been said by the last speaker. He was of opinion that it would be better that the landlord should have power to distrain for a year's rent and then to sue as like an ordinary creditor. He thought that would be right and fair. If they went too far and tried to do away entirely with the present law, they would, if successful, probably do more harm than good. In his part of the country, it very seldom happened that a man got farther than a year and a half in arrears. In his experience he could hardly point to a case in which the landlord allowed the thing to go on quietly until a year and a half's rent was due. He thought therefore, and he hoped those present would agree with him, that this proposal would be satisfactory, both to the landed interest generally and to the tenants, that the landlord should have the right to distrain for one year's rent and then come in as an ordinary creditor.

Mr. C. S. READ, M.P.: I am glad that the members of the Club who have spoken on this subject have not made the same kind of apology for the Law of Distress as was made by the gentleman who read the paper. My opinion is that the Law of Distress is wrong in principle (Hear, hear). It allows a man to be his own avenger, which is, I consider, contrary to the spirit of our laws altogether. It also allows him to be an avenger of his wrongs in private. The Professor says there is a certain amount of publicity about the matter, but I contend that there is none until such time as action is taken. The landlord can go into the street and get some blackguard fellow who is designated "the man in possession" to act as his bailiff. If that is the law it ought to be condemned, by this Club, although it does not pass resolutions. I contend that this law is worse in principle than the almost doomed law of hypothec in Scotland. No doubt the Law of Hypothec was some years ago much worse than the English Law of Distress, because it permitted the landlord to follow the goods of the defaulting tenant not only off the farm, but to a second buyer, and I believe even to a third one. That was done away with in the year 1867, and that amended law, which is now going to be abolished is, I contend, a better law than the Law of Distress, which now allows a landlord to seize for six years' rent. (Hear, hear.) I think I am right in saying that at present if a landlord in Scotland wants to proceed against a defaulting farmer, he must go to a court, where he can compel him to give security for the next year's rent. I see Mr. Barclay, who is a member for a Scotch county, in the room, and if I am wrong he will put me right. I believe the landlord has in such a case to go before a court, and the courts of Scotland are not merely courts of law but also court of equity, and the judge, who is called the sheriff, will inquire whether there is any real cause for demanding security for the rent, and if substantial security is given there can be no seizure. Now, there are some parts of Mr. Wrightson's paper on which I wish to say a word or two. I was really astonished to hear this—"If the Law of Distress was abrogated, no doubt hundreds of struggling tenants would go to the wall." "Farmers," the Professor went on to say, "would pass into the hands of their owners, and the competition for the remainder would be as severe as ever." Do we find this the case at present? We have the Law of Distress, and we have distress among farms, and the consequence is

that a great number of farms are thrown upon the market. Do we find that the landlords of this country are anxious to cultivate the farms which thus fall in? Do we not find that they prefer accepting a very great reduction of rents?

Professor WRIGHTSON said he was supposing the case of the law being altered.

Mr. READ continued: In consequence of the depressed state of agriculture a great number of farms have recently been thrown upon the hands of landlords, and I believe they have not shown any desire to occupy them. With regard to bankruptcy, the law is, we are told, that a landlord can only have one year's rent in full, and that beyond that he must take his chance with the other creditors. A most extraordinary thing, however, connected with that point has happened recently in the county of Suffolk. A tenant who occupied under a lease having become bankrupt, Lord Chief Justice Cotton gave a decision to the effect that the trustee could not be allowed any valuation; the result being, it appeared, that the landlord pockets, so to speak, the outgoing tenant's hay, manure, tillage, roots, wheat-sowing, &c., which were, in February, 1878, valued by Mr. Biddell, of Lavenham, at £968 14s. That is an extraordinary state of the law; and I hope that when the Legislature has under its consideration the amendment of the law of bankruptcy, that special privilege of landlords will be made to cease and determine. It seems that in the case to which I allude, there being four years of a lease unexpired, after deducting £400, that is, £100 a year for the remainder of the term, from the valuation, there was an absolute gain to the landlord of £568 14s. through the failure of his tenant. The paper from which I am quoting goes on to say, "It will be asked how came the trustee to dissolve the lease, or rather the farther tenancy of the farm, without securing the valuation upon it? He was advised by one of the most eminent counsel that the landlord must pay it. Further, he had no means to carry the farm on, though these would have been forthcoming if the landlord would have allowed him to carry it on until next Michaelmas." Thus you see what an extraordinary privilege the landlord possesses under the bankruptcy law (Hear, hear). I hope that the law of distress will be amended, rather than repealed. Although the law is wrong in principle, it must be remembered that it is ingrained in our agricultural Constitution, and I think it is better to amend than to repeal it. There is a motion on the notice paper of the House of Commons to call attention to the Law of Distress, and propose a resolution in favour of its abolition. I have thought it desirable that I should move an amendment to the effect, first, that the power of distress should be limited to one year's rent; secondly, that other people's stock should be protected to this extent, that when it has been put on a farm for grazing purposes the owner should only be liable for the amount of the keep due, that being part of the present Law of Hypothec in Scotland; and, thirdly, that if there are any hindrances or difficulties with regard to the landlord's right of re-entry, they should be removed. I entirely concur with what fell from Mr. Howard, especially on one point. There can be no doubt that the landlord is an exceptional creditor, inasmuch as he cannot lose his capital, but only the interest on it, that is, his rent. This question has been brought prominently forward recently through a case in which the Law of Distress was carried out to its fullest extent. A rotten and insolvent tenant owing six years' rent, the Law of Distress was brought to bear very hardly on a neighbouring farmer who had put his sheep on the land (Hear, hear). In my opinion that was nothing less than legal robbery, and I do hope that the law of distress will be so altered that nothing of the kind can happen again. I must say it seems a marvel to me, considering how unjust this law is in itself, that so few cases of hardship have arisen under it (Hear, hear). This shows that the landlords of England are an exceptionally kind and liberal race of men (Hear, hear). I do not believe that such a law could have existed in any other country without a great number of cases of practical hardship arising from it. The CHAIRMAN said he believed the gentleman to whom Mr. Read had referred, and who had suffered very greatly from the operation of the law through having put his sheep on land occupied by another farmer was here, and he would ask him to say a few words on the subject.

Mr. LAKE (Sittingbourne) said he came there to.

listen rather than to speak, but as he had been asked to say a few words he would detain them for a short time. Himself and his father had been in the habit of putting out large numbers of sheep for 70 years. In the case referred to he had put them out through an agent; there were 195 of them, and they were put out with an insolvent tenant. As it turned out, the agent knew nothing of the man's real position, and was very much surprised to hear that they had been seized by the landlord. They might have been sold without his ever hearing of it had the farms not been adjoining ones. His (Mr. Lake) was a loser to the extent of £400; another case on another farm belonging to the same landlord—hay which had been fairly bought and paid for to the extent of £100, had been seized. He knew of other cases in which people had advanced money, and never received anything. Could there be a more unjust law than that? He contended that it was a most iniquitous and unjust law (Hear, hear). He had seen the working of it (loud laughter), and ought to know. To look at the matter practically, as soon as a man sticks a spud in the ground he gives security for the rent. He borrows from his friends and gets credit from his tradesmen, and then the landlord takes everything, seizing on the property that others have put on the land. Take another view of the matter. A tenant did not get the same amount of credit under this system that he otherwise would, because it was known that the landlord could take everything. As a result of this, a tenant in his neighbourhood had lately made himself a bankrupt in order that the landlord might not be able to distrain for more than one year's rent. He thought what he had pointed out was sufficient to prove that the law should be altered.

Mr. AVELING (Rochester) said he appeared before them as a manufacturer. He assured them that the class to which he belonged felt very strongly that this law was very unfair and prejudicial to their interests, and to the interests of agriculture. Last year his firm sold a set of steam ploughing machinery of about £2,000 value to a farmer, from whom he had received references—one from the clergyman of his parish, who gave him an excellent character. The machinery had, however, been at work only about two months when he received a telegram on Sunday morning to this effect:—"Sorry to tell you a distress put in for rent; ploughing machinery in a neighbouring farm, get it if you can." He fortunately was able to remove the machinery the same night, and so he lost nothing. They all knew that at the bottom of the circulars of the great waggon companies were the words "deferred payments," and how could any one expect him, Mr. Howard, or Messrs. Fowler to enter into a large contract with deferred payments in such a state of the law as that which now existed. They could not go to a tenant farmer and ask him to show his last receipt for rent. He did not wish to go into the question fully as to the result of a change in the law, but he believed it would be beneficial to agriculture to have it altered.

Captain DELF (Walton-on-Naze) said he felt quite certain that it would be a good thing both for the manufacturers and users of agricultural machinery if the Law of Distress were repealed. The Essex Chamber of Agriculture, of which he was a member, Essex itself being one of the most Conservative counties of England, had lately adopted the following resolution:—"That in the opinion of this Chamber the existing Law of Distress is injurious to the best interests of the landlord, unjust to the tenant, and deceptive to the trader, and that its repeal is imperatively demanded." That resolution was passed in February, and a petition in accordance with it was presented by Colonel Brise, a member for the northern division, on Friday last. The Law of Distress was an octopus to land, being stealthy in its action and sending out its tentacles in all directions; it tended to strangle the energies and intelligence of the cultivator of the soil, and the subtlety of its operations was one of the greatest objections to it. No gentleman who had not studied the matter could have any idea of the injury that law occasioned. It not only gave a preference to the landlord as a creditor, but it enabled him to make terms with regard to the cultivation of the land that he would not be otherwise able to make. Some hypothetical cases had been put before the meeting by one or two of the speakers. Might he be allowed to give two cases that had come under his own notice, one contrasting with the other? The first case afforded an illustration of what he might call the philanthropic view of the matter; in other words, it was the case of a small tenant farmer. A gentleman in the north of England had written to him respecting the case of a widow,

who occupied half an acre of land and a small house, and endeavoured to live on the produce. This poor woman got into arrears with her rent, and several appeals for it were made to her, which were not responded to; eventually the landlord himself called on her and, on her admitting her inability to pay said: "I think I can show you a way out of the difficulty. You must get a brief from me." Well, she got up a brief, the cow was left to the poor woman, and for some weeks she had the benefit of it. But what was the final result? The very man who had suggested the humane course came down and seized the cow—the case affording an unfortunate illustration to the women of the operation of the Law of Distress. Another case which occurred within the last six weeks affords an illustration from another point of view. In this case he knew the whole of the circumstances perfectly well. A tenant took a farm eighteen months ago, it being on the landlord's hands at that time. The tenant is now in difficulties. The valuation made at the commencement of the tenancy has not been paid, the three half-year's rent; in fact, nothing has been paid. That is a very startling case. Some gentlemen may think the picture overdrawn, but he assured them it was not. An implement maker—not a man doing business on such a scale as Mr. Aveling or Mr. Howard, but a respectable man in his trade—supplied new carts at the value of £80. The carts, as well as everything else, were seized by the landlord for rent, and the poor owner of them was left out in the cold. That was another illustration of the operation of the present law; to his mind it showed that the arguments used to weigh in its favour were insufficient. The agent who transacted the business told me that another person offered a fair amount for the farm, but that the man who got it was accepted because he offered 5s. per acre more than in the opinion of practical men in the neighbourhood it was really worth. That appeared to him a striking proof that the present law does not tend to raise rents. At the present time, when so much was being said with regard to cultivating the intelligence of men about to engage on farming pursuits, it seemed to him that any law must be exceedingly obnoxious which tended to interfere with freedom of contracts in connection with the cultivation of land. What was the use of such a college as that at Cirencester, or the teachings of Mr. Laws, Dr. Voelcker, and others, if, when men took intelligent views of farm management they were prevented from carrying them out, as was the case at present? The question under discussion had direct bearing on that of freedom of contract, and he maintained, with the Essex Chamber, that the existing Law of Distress was injurious to the best interests of landlords, as well as of those of tenants. It might indeed enable a landlord to squeeze out 5s. an acre more rent than he otherwise would, but it would not conduce to their permanent benefit.

Mr. BARCLAY, M.P., having risen in response to a call from the chairman, said he had come there, not for the purpose of speaking, but for that of listening to the paper and the discussion. He must say that he had been exceedingly interested in the paper, and particularly in what the Professor said with regard to the origin of the law; but, on the other hand, he was very much surprised at the conclusions which were arrived at on that question (Hear, hear). It was not for him to urge his opinions with regard to the effect of the Law of Distress in England, but as the Law of Hypothec in Scotland had been referred to, he daresay the Club would be glad to know what were the opinions of the farmers of Scotland with respect to it. Without entering into details, he might say of that law that it was perhaps a little more rational than was the Law of Distress in this country. The effect of both was perhaps in one respect very nearly the same; that was to say, the landlord had absolute security for his rent, whether it were fair or not, whether he exercised a wise discretion in the selection of a tenant or not, whether he acted prudently in letting the farm or imprudently. He had often heard similar arguments to those urged by the Professor in support of the Law of Distress used in support of the Law of Hypothec (Hear, hear). When he heard a land agent the other day point out that there was a quasi-partnership between landlord and tenant, it occurred to him that a partnership might be very desirable at the present time (laughter). But in point of fact there was no more partnership between a landlord and his tenant than there was between a banker and his customers (Hear, hear). The object of both the landlord and the banker was to make a profit by means of the customer, and the only difference between the two cases was that whereas the landlord could

get back his land if the customer failed to pay, the banker could not get back his money in a similar case (Hear, hear). He did not know what effect the Law of Distress provided in this country as regarded the supply of implements, manure, and so on; but the farmers of Scotland had complained that through the operation of the Law of Hypothec they had had to pay a higher price for everything they wanted, amounting, perhaps, to 2½ per cent., in consequence of the preference which was given to the landlord (Hear, hear). The Professor said that if the Law of Distress were abolished the landlord would still be able to secure himself by means of private contract. He daresay the landlord might secure himself privately by requiring that the tenant should pay his rent in advance, and he would have a perfect right to do so if he thought proper; just as Mr. Howard and other instrument makers might secure themselves as regarded what they sold. If a landlord wanted absolute security for his rent, by all means let him have it; but let him go into the market for security and obtain it as other people obtained it. There was certainly no reason why the landlord should be secure as regarded the interest of his money while other people risked both principal and interest. He had no desire to reproach landlords for doing what they could for their own benefit, but, on the other hand, he did not think agriculture should continue in its present position in relation to that matter. As regarded the interest of the poorer tenants, it is true Mr. McCombie put the matter very truly when he said that the law "enabled a poor man to get a farm, and certainly kept him poor" (laughter). He thought the arguments of the Professor on that point tended to this—that landlords should be encouraged to take tenants with insufficient capital, through being secured at the cost of other persons as respected the payment of their rent. In Scotland the effect of the present law had been to increase the number of candidates for small farms, and to enable the landlords to obtain a higher rent than they otherwise could without caring much about capital, and small farmers had arrived at the conclusion that such a state of things was not for their benefit. It seemed to him that as a rule a man must have some capital to have any chance of success. The average size of the farms in Forfarshire was about 50 acres, and the occupiers had discovered that the existing law was by no means advantageous to them. Experience had shown that farmers could not pay 5 or 6 per cent. for the capital they employed, and live on the farm; and the people of Scotland generally believed now that it was an advantage to a man to have a farm with insufficient capital to work it. No doubt there were cases of exceptional ability having secured success, but on investigation he had generally found that in such cases ordinary farming was accompanied by juggling in cattle or something of that kind. He should like to have shown how the Law of Hypothec interfered with the letting of land in connection with the action of land agents. He thought that if the Law of Hypothec were abolished there would be a new kind of arrangements for dealings in land, and that land would in future be managed not by lawyers and other persons of that kind, but by resident factors.

Mr. W. E. BEAR (Sorbilton) said he understood Mr. Hodges and Mr. Read to propose that the right of distress should be limited to one year; but their arguments pointed to a repeal of the law and not a compromise. Mr. Hodges remarked that one objection to the law was that a man who bought stacks of hay or straw was in danger, because the landlord might come in and seize them for rent. If the period were reduced to one year that difficulty would still exist. Mr. Read said that the law was wrong in principle. If it were wrong in principle, why should it be maintained even to the extent of the limit of one year? He was very sorry that the meeting was not allowed to pass a resolution, as for one person who read the discussion a thousand would read a resolution, and he thought to pass a resolution after that meeting was concluded would be better than nothing at all (Hear, hear).

The Secretary (Mr. S. B. L. Druce) said perhaps he might be allowed to say a few words on the subject under discussion regarding it as he did as being rather more a legal than a directly agricultural one. There was one point of view from which the question had not been taken hold of and considered in the discussion, and that was the landlord's. Were there not, he would ask, good reasons for retaining the Law of Distress, not exactly in the same way and to the same extent as

now, but with limitations and modifications such as those advocated in the paper? It was well known that money could be borrowed on better terms on the security of land than on any other security. Why was that? Why could owners of landed estate borrow at a lower rate of interest and on better terms than any other class of persons? He did not hesitate to say that it was, to a great extent, because of the Law of Distress (expressions of dissent). That was well known, he believed, to gentlemen who were concerned in such matters (No, no). He heard some gentlemen in the room say "No"; but he would refer them as authority on the point to the evidence of the Royal Commission which sat to inquire into the operation of Hypothec in the year 1865. Among the witnesses, examined by that Commission, was a solicitor practising in London, who acted for some of the largest insurance companies, who he believed lent larger sums of money on land than any other bodies in the country, and that solicitor gave it as his opinion that if the Law of Distress for rent were abolished, landowners would find very great difficulty in borrowing money; at all events, would not be able to borrow it on the same easy terms as they did then. If that were the case, had it not a close bearing on the question now under discussion, even from a farmer's point of view? Did not landlords, when they had to make improvements on farms for the benefit of their tenants, as well as for their own, require, in nine cases out of ten, to borrow the money? If, therefore, the Law of Distress were abolished, it would make it more difficult for landlords to spend money on improvements. Hence there would be fewer improvements, and tenant farmers would in that way be damaged instead of benefited by the abolition of the law. Another reason why he thought the law should be retained was that it was a well-known law. He quite agreed with the reader of the paper in thinking that if it were abolished, some means would be taken privately to give the landlord the security he now possessed, or what was tantamount to it, in each particular case. It was said that the law was not fair to the ordinary creditor—that it was not fair to put the landlord in a better position than the ordinary creditor. But they had to bear in mind that the ordinary creditor could stop the supply of his goods at any time. On the other hand, the tenant was on the farm and how was the landlord to get him out? It was one of the most difficult things in the world to get an occupier out of possession (Hear, hear). Every landlord knew that every lawyer knew it, and he should think every tenant knew it as well. It would be remembered that at the Berlin Conference last year Prince Bismark, in speaking of possession, used the expression, *Beati possidentes*—happy are those in possession—or, as it was put in the English proverb, "Possession is nine points of the law." When a man had possession of land the owner had the greatest difficulty in turning him out if the necessity arose. He had to bring an action of ejectment for that purpose, which in many cases was a long and costly affair. Whilst he, the speaker, did not advocate the total repeal of the law, he agreed with those who suggested that there should be very great alterations in it (Hear, hear). He thought they were very much indebted to the hon. gentleman who had spoken last for telling them so much as to the operation of the Law of Hypothec in Scotland. He (Mr. Druce) had, of course, no practical experience with regard to that law, but he was inclined to think that it would be a very great advantage to English tenant farmers if the Law of Distress in this country were put to a certain extent on the lines of the Law of Hypothec in Scotland as it was altered in 1867. By the Act passed in 1867 it was enacted that Hypothec should only be available for three months after the rent was due. Why not make this the law here? (Hear, hear). He quite agreed with the gentleman who said that it was an iniquitous thing that a landlord should be able to allow a tenant to get six years in arrears for rent and then sweep down on the farm and take possession of everything he found on it even of what belonged to other people as well as to the tenant; but if it were enacted that a landlord should not be allowed to distrain after the expiration of three months from the date of the rent falling due, that would do away with this cause of complaint and remedy the evil which had been so justly complained of. Another objectionable point in the present law was the landlord's privilege of seizing agitated stock. In that respect again the Law of Hypothec was altered in 1867, it being enacted that the stock of a third party on the farm for grazing or feeding should be liable only to the amount payable for such grazing or feeding. That seemed to him to be a fair arrange-

ment, and he thought the English law should be altered in the same way. It was also provided in the Act of 1867 that household furniture, agricultural implements, manures, feeding stuffs, and draining tiles, should be exempt from the Law of Hypothec. These things were treated just as a man's tools or the things which were used in trade were treated under the Bankruptcy Law. The two cases were parallel, and he did not see why the English law should not be altered in that respect too, as had been the Scotch law. There was another respect in which it appeared to him that the English Law of Distress might be assimilated to the Law of Hypothec, and that was that in cases of distress there should be judicial interference, and that the thing should not be done in a hole and corner way. In this country, as Mr. Read remarked, a man might be taken out of the streets and put in possession of a farm, but in Scotland it was necessary that an application should be made to a local court—the Sheriff's Court; in England it might be the county court, such courts being spread throughout the length and breadth of the land. Another point in which the Scotch law seemed to be better than their own, was that provision was made for taking an inventory merely of the goods instead of actual possession of them, an arrangement which, in many cases, prevented that needless shock to the tenant's credit which must arise from a man being put in possession.

Professor WRIGHTSON then replied. He said he would not reply to the attacks made upon his paper. He had done his best to introduce the subject in a straightforward manner, but perhaps his views would be modified by some of those expressed in the able speeches which had been delivered. Although the sense of the meeting seemed almost in favour of repeal, yet he did not think any speaker had gone quite so far as to advocate repeal. There was evidently a general feeling that although the Law of Distress might be hard, the right of the landlord to recover his rent could not be entirely taken away. That was exactly the view which he took in his paper. Instead of advocating sweeping changes in the law he had taken two years as the best limit to be followed; but in his present state of mind he must admit that it would be more logical to restrict the landlord's preferential right to one year. According to his own view, the landlord had a sufficient security for his rent in the produce of the farm, and he did not see how he could claim in that respect for more than one year. With regard to the seizure of stock on the farm belonging to a third party, he had already expressed the opinion that that part of the law ought to be entirely abolished. He could not see why a landlord should be allowed to seize the goods of a third party for rent due to him from his tenant.

On the motion of Mr. NEILL, seconded by Mr. SHERWIN, a vote of thanks was given to Professor Wrightson for his paper, and, on the motion of Mr. CHEFFINS, seconded by Mr. MARCH, thanks were also given to the chairman.

### BOTLEY AND SOUTH HANTS.

At the meeting of this Club held recently, Mr. James Kent read a paper on the question "What improvements are required in the Corn Returns Act and in the collection of Agricultural Statistics?" He concluded with the following statements:—

1.—"That the first agricultural county in the world should be without satisfactory statistical reports of its state and progress is very detrimental to its present and future welfare."

2.—"That the absence of correct information of the produce of the country is alike injurious to the producer and consumer, neither having any reliable idea when to sell or purchase."

3.—"That the uncertainty frequently leads to severe loss on the part of the needy farmer by forced sales subsequent to harvest, whereas, if real facts were known, a corresponding price would be realised proportionate to the truthfulness of the return."

4.—"That it is the duty of the Government to obtain correct returns of the annual produce of this country, and that the information should be circulated throughout the kingdom as early as possible each year, that all parties may have the benefit thereof."

5.—"That it be considered what month in the year is the most suitable time for the publishing the said returns."

After some discussion the following resolution was adopted,

on the motion of Mr. CREW, seconded by Mr. F. HARRIS:—  
"That in the opinions of the members of the Botley and South Hants Farmers' Club the present mode of obtaining corn averages is most fallacious, and that the returns should be made compulsory both by the producer and the purchaser also, that Lord Henry Scott be asked to put a question in the House of Commons as to the practice of selling corn by weight and its effect upon the corn averages."

The club then proceeded to discuss the second part of the paper with reference to agricultural statistics.

Mr. BLUNDELL proposed "That this club is of opinion that our agricultural statistical returns should be made compulsory on the 1st day of May, and that the returns should be issued by the Board of Trade not later than the 1st day of July in the same year, and that they should be published on that date in the *London Gazette*, *Times*, and leading daily and agricultural journals."

This was seconded by Mr. G. E. KENT, and agreed to *acm. dia.*

### FRAMLINGHAM. AGRICULTURAL DEPRESSION.

A monthly meeting of this Club was held, on March 24th, at Framlingham, the subject announced for discussion was "Agricultural Depression" introduced by Mr. T. ROSE, of Melton Magna, Norfolk. The following is the principal portion of the paper:—As to the seriously depressed condition into which British agriculture has fallen, there cannot be any possible doubt; and, moreover, there will be a general consensus of opinion as to the causes that have conducted to it. But I fear there may not be the same concurrence of opinion as to the remedies to be provided. The gravity of the position is universally acknowledged. There is no doubt as to the condition of the patient. The question is, by what treatment can that condition be ameliorated, and the life of the patient be saved? I hope in the course of this paper to make certain suggestions that have occurred to me as tending to the solution of that question, the discussion of which by our chambers of agriculture and such farmers' clubs as this will, I believe, be of general service and benefit. Of one thing we may be sure—that no suggested remedy, if adopted, can intensify the malady or still further complicate the case. It is an astounding fallacy to suppose that the depression in agriculture only dates back for the past three or four years. I contend, and I am sure it is a contention which your experience will endorse, that our difficulties and troubles first assumed a serious aspect as far back as 1865 and 1866, when the cattle plague—that dire free-trade-imported scourge—decimated our breeding stock. Then, following in its wake, came the foot and mouth disease, which ruthlessly struck down what had escaped the ravages of its predecessor. Sacrificing its ten of thousands, it was still unsatisfied. To complete its work, it bestowed upon those who survived its direct onslaught a heritage of constitutional weakness that had a most serious effect upon their breeding properties. Flocks and herds were thus destroyed without even the grim consolation of being able to replace them. And yet, foreign as these diseases were demonstrably proved to have been, what a storm of free trade invective had to be encountered before even a modified measure was passed to give us in some degree protection from disease in the future. It was in vain to point out the cost of these diseases and the consequences to the consumer. The cry was raised that it was not from disease, but from competition, that the farmer claimed protection. As though an increased home supply could fail to be of advantage to the consumer! Even in the short interval that has elapsed since the Cattle Diseases Act was passed, we find that the prognostications of its opponents have already been falsified, and that the price of meat has become cheaper rather than dearer. Besides the diseases to which I have referred, a powerful contributory cause to the existing agricultural depression has been the succession of unpropitious seasons which we have experienced of late years. There were the great droughts of 1868 and 1869, that in the former year being the worst we have ever experienced. A great number of sheep and cattle had to be sold from sheer necessity; and the bad seasons which followed, accompanied by low prices, had a most crippling effect upon the farmer, who has since



longed in vain for a return of the "good old times"—those times when wheat was from 60s. to 70s. per quarter, with lower rents, and foreign competition unknown. This brings me by a natural transition to the questions of our foreign and colonial imports in their relation to the existing depression. After all, it is in this direction that we must look for the more serious of the several causes that have operated in bringing about our agricultural deficiency, amounting at the lowest computation to 30,000,000 sterling for each of the past three years. Mr. Bear may therefore, well say in his able paper, contributed to the present number of the *Fortnightly Review*, that "There is a very general conviction amongst farmers that even with seasons of average fertility they will not be able to hold their own against the world under the existing conditions of farming." To those conditions I shall hereafter refer. Before proceeding to do this, let us glance at the real nature and extent of the foreign and colonial competition with which we have to contend. It has long since become manifest that we cannot grow wheat against the virgin soils of other countries, with, moreover, the disadvantage that wheat is not a plant indigenous to England, and that our variable climate is unsuited to its successful growth. A novice, indeed, might attend Mark Lane, and, so far as appearance is concerned, prefer the more pretty looking Suffolk or Norfolk sample of wheat to one presented from Russia; but I need not ask you which would be the more valuable of the two. Is it not a fact that where formerly beans were used in strengthening English flour, the miller now turns his attention to Russian wheat, and for very good reason? Powerful as America has become in the universal competitive race, so far as the future prospects of agriculture are concerned, I fear our valuable dependency, India, much more. In America labour is dearer than in India, and the latter has the two-fold advantage of heat and humidity, so that it abounds with luxuriant vegetation. It is only within the last five years that what can be dignified by the term "cultivation" of the land has been inaugurated there. And yet it can already send us enormous and ever-increasing cargoes of wheat, shipping them to England at a rate of carriage not greater than a consignment of wheat from a midland county to London; whilst the rent of the land upon which it is grown is no more than 3s. per acre. Our Indian export trade is upwards of thirty millions per annum in value, and the imports about twenty millions, the latter principally consisting of cotton goods and iron. India thus affords, as we shall see, a striking exception to other countries with regard to the relative value of its imports and exports, a matter which I think of no inconsiderable commercial importance when we reflect that the coal production of Great Britain and Ireland is three times greater than that of the United States and Germany, and yet that we are undersold. In turning to the United States we find that for 1875 and 1876 our imports amounted to no less than £111,600,000, an increase for the latter year of £5,653,652, whereas our exports showed a diminution of £4,500,000, the total for the two years reaching only £30,500,000. Our French neighbours sent us £70,000,000 against our £38,500,000. With Russia, again, our import trade amounted to £27,000,000, whereas the export trade was less than one-half—viz., £11,000,000. Between the years 1866 and 1876 we find a startling difference. Whereas in the former year the imports averaged £9 17s. 2d. per head of the population, in the latter they were £11 8s. 5d. as contrasted with exports averaging in 1866 £6 6s. 2d., and in 1876, £6 16s. 6d., showing, in point of fact, a difference in 1876 of nearly £5 per head between the imports and exports, or the enormous total for the whole country of £155,000,000. With respect to the United States, a comparison of the returns for the two years I have mentioned shows a difference of between twenty-three and twenty-four millions in favour of America, and a balance of about seven millions and a half against this country. Of all nations the only one that has approached us with anything like trading mutuality or reciprocity has been Germany, the exports and imports in 1875 standing respectively at £21,836,401 and £23,287,883—even there, however, the balance being against Great Britain. The figures naturally relate to the state and interest of commerce as well as of agriculture. But from whichever side they are considered, steadfastly standing by the principle enunciated in commencing this paper, I affirm that they all point a moral which may well give rise to anxiety as affecting the welfare and prosperity

of the entire nation. Yet it is curious to observe that in the agitation that is being raised by the representatives of British commerce against the principles that are held to influence, if not to be wholly responsible for, the worse than standstill state to which the country has been reduced, how strangely the British farmer is ignored. After referring to "one-sided" free trade and objecting to the Malt Tax, Mr. Rose proceeded. Another serious drawback from which the British farmer now suffers is the enormous quantity of colonial wool imported into this country. He bears both a direct and an indirect loss—directly, through a greatly depreciated value of wool; and, indirectly, through the greater discouragement he encounters in the breeding of sheep. The superiority of colonial wool, owing to the more favourable circumstances under which it is produced, is a fact beyond dispute, and I suppose you will generally concur with me that its introduction into this country has had the effect of reducing the value of our English wool to something like eighty or a hundred per cent. Let me, then, quote a few statistics to show the increasing extent to which the breeding of stock and the production of wool in the colonies is carried at the present time. From New South Wales in 1875 we received £3,000,000 worth of wool, and in the June of the following year there were no less than 24,382,536 sheep, and upwards of three million cattle in the colony. Whereas in 1858 there were only a million and a half of sheep in New Zealand, there were just twelve millions in 1874, with a half million cattle, and the imports of wool to this country had increased from £1,761,614 in 1870 to £3,079,116 in 1875. From Queensland in 1875 the value of the imported wool was £769,889. South Australia in the same year sent us wool to the value of £1,864,303, and it possessed at that time 6,179,395 sheep and 219,240 head of cattle. From other places we received in 1875 the following additional amounts:—Tasmania, with 1,614,645 head of sheep and 113,109 head of cattle, £388,392; Victoria, £2,706,709; Western Australia, £132,680; and Cape Colony, with 9,836,065 sheep and 692,514 cattle, £2,492,736. How vast are these sources of supply. And yet I have thus far omitted to mention the United States, which in 1870 numbered 28,477,951 sheep and 28,074,583 head of cattle, whilst the cows alone at the present time number upwards of 13,000,000, being six times more than the number in Great Britain, and twice as many as in the great dairy country of France. Then these figures, suggestive as they are, do not disclose in themselves the whole truth. Therefore, while in other countries there is a marked increase, in the United Kingdom there is no appreciable difference. In 1871 we had 27,119,569 sheep and 5,337,759 head of cattle, whilst in 1878 there were no more than 5,738,128 head of cattle and 28,406,206 sheep. This meat and wool supply is a difficulty which will certainly be an increasing one, both with respect to our colonies and the United States. With an improved quality of meat, and with an export trade only to be judged by its unlimited sources of production, the afflictions of the English producer can only be patiently borne. For how should it be otherwise? We have already noted the vastness of the field of production, and that our enterprising "cousins" are determined to cultivate it to the highest and most remunerative advantages may be gathered from a few additional statistics, the significance of which speak for themselves. In 1870, the number of cattle in the United States, according to the census, was 28,074,523, and that of sheep 28,477,951; and according to the last official estimates there were 30,523,409 cattle, and 35,740,500 sheep in 1878; thus showing an increase of 2,448,818 cattle and 7,262,540 sheep in the eight years. We find, from the estimates recently presented to the Agricultural Department of the United States that there were in 1878, 10,339,700 horses, 11,300,100 milch cows, 19,223,300 oxen and "other cattle," 35,740,500 sheep, and 32,282,500 hogs. The average value of the stock was fixed at £13 2s. for horses, £5 10s. for milch cows, £3 11s. 5d. for oxen and other cattle, 10s. 4½d. for sheep, and £1 0s. 9d. for hogs. It is simply marvellous to contemplate the development of which the American beef and live stock trade with Great Britain is capable. In the past year 85,000 cattle, 65,000 sheep, and 15,000 pigs were landed here, against but 424 cattle and one sheep in 1873, whilst the entire weight of meat for the same year was 53,661,316lb., with a money value of £1,264,764 as compared with 16,155,632lb., with a money value of £389,395. The total money value of dead meat from the whole of



Europe for the same year was but £66,535. Another matter of grave importance in connection with this branch of our subject is the keen competition that has of late resulted from the importations of improved cheese and hams. Our English products are being driven from the market, a complete revolution having been effected in this department of agriculture. To our forefathers such a change would have seemed impossible. For we are told on authority, surprising as it may seem, that the wholesale prices of American cheese vary from 2d. to 5d. per pound, of butter from 5d. to 11d., of bacon from 2½. to 3½., of hams from 3½. to 5d., and of lard from 3½. to 4d. per pound. These figures indicate that low as are the prices prevailing in our English retail markets, they might, and would be, still more favourable for the British consumer and disadvantageous to the British farmer, but for the enpidity of that highly speculative race—the “middle men.” Such, then, are some of the causes that have tended to the state of depression from which agriculture is suffering. What we have now to consider are the remedies that are available or practicable. In doing so, I must first note an encouraging symptom, as indicating the sympathy of landlords with tenants, that in many instances there has been an appreciable reduction in the rent payable under old and unexpired leases. No doubt a general reduction of rents would be an important measure of relief, but in itself it would not permanently mitigate the disorder. By the great period of extraordinary commercial prosperity that we experienced a few years ago, and the unhealthy competition for farms that then prevailed, no doubt the value of land was forced up to an unnatural point, and, therefore, that the high price of land has had a tendency to aggravate the evil of which we complain. But something of a far more enduring nature is needed for a thoroughly effective treatment. This, I believe, can only be found in an abrogation of existing restrictions as to the rotation of crops—by, in fact, conceding to the tenant perfect freedom of cultivation. This has already been granted in some cases with which I am acquainted; and for the purpose of obtaining something like a universal application of the right, as well as for a general consideration of the whole question, I would suggest that there should be a National Conference of landlords and tenants, held, say, in London, in the course of this year. The conclusions of such a conference, if thoroughly representative, would command attention, and might influence the legislative action of Parliament, so that when devising measures for the benefit of agriculture, they will in future give us something more genuine and real than such a hollow sham as the Agricultural Holdings Act. In these matters of what earthly use is permissive legislation? As connected with this branch of the subject, I am strongly of opinion that the Law of Distress should be abolished. An important remedial measure—and one indispensable to the success of free cultivation—is to be found in the erection of buildings by landlords, so as to facilitate the proper protection and careful housing of cattle. It is true that as a rule the farms of our large landed proprietors are not let dear, but, as I have intimated, the question is one of life or death, and in such circumstances sacrifices will have to be made. More permanent pasture, the landlord to find the seeds, would be a valuable aid. Let there be a less acreage of roots with higher cultivation for those that are grown; let seeds lie two years instead of but one, barley of course following roots; and coincident with change of cultivation a blow should be struck at the over-preservation of game—ground game to be summarily disposed of—for although landlords may not desire to inflict injury upon their tenants, the same remark cannot be extended to many of their keepers. Again, the farmer should be relieved from such charges as the Education Rate, the fire insurance on farm buildings, and the Game Rate. The introduction of a fairer system of taking the corn averages—which at present does not include the damaged and tail corn—with the cost of carriage ignored, is another matter now exciting attention, and is becoming of urgent importance. Foxhunting might also with advantage be more encouraged. Norfolk and Suffolk, especially Norfolk, are strictly game-preserving, not hunting countries. On the other hand, take the case of Yorkshire. That is a fine hunting county, where many splendid packs are kept, with a meet nearly every day. What is the result? The Yorkshire farmer finds it to his interest to breed a great many hunting horses, the stables of those well-to-do often containing some five or six animals worth from eighty to two hundred guineas

a-piece. These hunting facilities give a grand stimulus to the breeding of horses; and we cannot wonder that fox preserving is something sacred in Yorkshire; whereas in Norfolk if a gamekeeper sees a fox in a game preserve, Master Reynard is forthwith sentenced to death. I would further suggest as another measure of relief, that more of our young farmers should be induced to emigrate to the better of our colonies, which constitute an illimitable sphere for agricultural activity and enterprise. In saying this I must not be thought insensible to the many superiorities and advantages, or the tender and attracting associations, that cluster around the mother country. In the main, I concur with the opinion that

‘He who in his native land is not content to stay,  
May leave it when he likes, and find a better where he may.’

But necessity knows no law, and there is no wisdom in embarking upon a career that can only end in disaster; and I am certain that as this is true of farming here in the present day, we ought to discourage an unnecessary multiplication of farmers at home. I have already occupied your time at great length, and I have no right longer to trespass on your patience; nor will I for more than a few moments. To the question of labour I have not yet alluded, because it has been so frequently entered upon by experienced and able men. The future of England may be said to be in the hands of the working and labouring man. For increased wages there ought to be returned better and more productive labour. Unhappily that has not been the case. The quality of labour has deteriorated, and its consequences have additionally perplexed the situation through shortened hours and worse work. Abroad, the hours of labour are practically unrestricted, and, as you know, the week of labour there is often seven instead of six days. I need not comment upon the important effects that flow from this cause alone. It is one, however, in respect to which the working man or labourer himself may supply a remedy. In referring to him and his position in the State, I can but express a confident hope that with the advance of education he will use the power that he has moderately and well, and as the day may not be far distant when the franchise which he enjoys may be extended to his agricultural brother, I think that we should be making a wise preparation for the contingency if we farmers had more direct representatives in the House of Commons. We have, it is true, in Mr. Clare Read, a tenant-farmers’ member, of whom the whole kingdom is proud, but, in such a body as the House of Commons, what is a solitary representative of agriculture, however courageous and able he may be, when pitted against the numerous direct representatives of commercial interests? Now, what is the conclusion of the whole argument? That a great crisis has arisen in the history of British agriculture—a crisis that may culminate in its death if there be not manifested a spirit of firm union and of thorough mutual co-operation between landlord and tenant. I have pointed out, or have humbly endeavoured to suggest, a few ways in which they may thus mutually act. We are told that an opportunity once lost is gone for ever. I cannot believe that the landowners of this country will close their eyes to the necessity, or deny their hands to an effort, for the deliverance of tenants from their present extremity. For with the agricultural interest, triple in its nature—landlord, tenant, and labourer—the mercantile and commercial welfare of the nation is indissolubly connected. If the knell of England’s agriculture be sounded, the days of our national supremacy will be numbered. Let, therefore, all unite in preserving and revivifying it. It is not a mere cold and cynical selfishness that actuates us; but a true patriotic devotion that has hitherto been, and I trust will ever remain, among the most distinguishing attributes of the Anglo-Saxon race.

Mr. F. BURCH opened the discussion. He said he was a sufferer from agricultural depression, and expressed general agreement with the lecturer as to the remedy. In his district farmers had suffered from very bad harvests, and the best remedy would be a providential dispensation in the shape of better seasons. With regard to rents, he believed they would decrease under the law of supply and demand, and that while landlords varied as to generosity, it would be liberal-minded ones who would pull through the stream, others being left without tenants. Cheaper labour he did not anticipate, but he hoped for more skilled and more responsible men. As 17

machinery, while it advanced agriculture, he doubted much whether it had decreased expenditure, and as to keeping stock, the fall in the price of meat led him to question the policy of laying land down to grass. The most hopeful feature of stock keeping was sheep, and he expected a fair price still for mutton.

The Rev. C. T. CORRANCE said there was no doubt the depression was general; but he considered it only temporary. It was owing to various causes, adverse to the interest of the farmer. The wheat harvests of 1875-6-7 had been about 24 per cent. below the average. The price of labour had increased in this district more than in the North of England, where it had advanced long before it had advanced here. Another cause was the immense importation of American meat, which threatened the graziers with the same disadvantages the corn growers had already met with. Considering the bad harvests, the marvel was that the depression had not been greater, and there must be elasticity in agricultural matters to bear up under the difficulties which threatened it. He gave some statistics showing that in 1851-2 wheat was 19s. 6d. per comb; barley 17s., and oats 8s. 6d. But from 1850 to 1855 the prices were respectively 35s. 6d., 18s. 6d., and 12s. up to 1875-6-7. The prices of corn had been fairly remunerative, and that in spite of foreign competition; so he hoped in this respect the depression was only temporary. The increased imports of breadstuffs was, in his opinion, a proof of the increased prosperity of the masses, while as to the chief sources of that supply, the cost of importation was equal to a duty of 40s., a considerable protection. Barley was safe from foreign competition, as long as Bass and Allsopp were more popular than Sir Wilfrid Lawson. Further encouragement might be drawn from the price of meat keeping up in spite of foreign imports. There again the cost of importation was 4d. per head for each ox. He believed with Mr. Bear that the maximum of fertility had not been reached, but contrast with the small production per acre in the United States was gratifying. The present wave of depression was largely due to extremely bad seasons; but though the land likes to go on credit, he believed this season was going to wipe off old scores.

Mr. R. GARRARD thought possibly better seasons would relieve farmers, but suggested that the present depression should prompt them to join heartily in demanding the repeal of the Malt Tax.

Mr. GRAY thought rent should come down, but liberal covenants were even more important than a reduction of rent.

Mr. J. BURT remarked that farmers were sharply taxed for home growth, while the foreigner might send his produce without any taxes of the kind. Education had added to the farmers' tax, and men at full wages had to be employed instead of boys. It was wrong for the Government to make such a law, that boys might not go to work under a certain age. Excess of game was also a great evil; and what was the use of telling farmers to drain, use artificial manure, &c., when a lot of things came and ate that which was produced? (Laughter).

Mr. GOODERHAM looked to freedom of cultivation as one remedy, and suggested a representative committee of farmers' clubs to meet in London to discuss the subject with landlords. He disagreed with Mr. Corrance as to foreign barley, mentioning that the Messrs. Cobbold were using it almost entirely.

The CHAIRMAN enumerated as causes of depression advanced rents, higher wages, coupled with disinclination to perform conscientious work, adverse seasons, increased foreign supplies, and a more luxurious style of living amongst farmers, as in all classes. Rents must be regulated by supply and demand, which would also decrease wages, though so low a level as before was hardly desirable. With regard to foreign competition, a member writing to him had suggested an import duty on barley and maize, and a reduced Malt Tax. The latter he had no great faith in, but it appeared scarcely right that foreign countries should have free entry to our markets, while they themselves enforced protective duties. The education of poor children, he complained, was not sufficiently practical, and industrial training was wanted, and even labourers felt this. He did not regard the present price of meat as very low, but thought Mr. Corrance's estimates of the cost of importation were too high. More liberal covenants were to be anticipated, but payments of rent in advance instead of the law of distress would not be a great relief.

Mr. ROSE, in replying, expressed a belief that double the amount of corn might be grown in England if absolute restrictions were removed. The Malt Tax ought to be repealed, as contrary to free trade principles. Meat must be lower in price, but the production of mutton was the farmers' greatest hope against American importation. As to high living, he challenged the Chairman to wear a corduroy suit with him to-morrow.

## NEWCASTLE.

A meeting of the members of the Newcastle Farmers' Club took place on Saturday, 29th March Mr. John Henderson, Horsley Hill, occupied the chair.

The SECRETARY (Mr. Thomas Bell) said it would be in the recollection of the members that some time ago a meeting of the club was held, and it was resolved to found an exhibition for students in the science classes in connection with the club at Science and Art School in this town. He was glad to be able to say that the appeal then made had been liberally responded to by the landowners in the district, and the £25 had been contributed without the funds of the club having to be called upon. He was glad to be able to say, also, that, after a good deal of negotiation with the Science and Art Department, the scholarships would be tenable at the School of Science in this town, only in the case of the local exhibitions supplemented by the Government the student must have power to go either to the Royal College in London or to Dublin. Mr. Bell reported also the acquiescence of the Royal Agricultural Society in the suggestion he had made to open the competition for their scholarship to students of agricultural science classes. In reply to Mr. Gray, Spital Hill, he added that the value of the local scholarship was £50 a year—the club raising £25, and that sum being supplemented by £25 from the Government.

On the motion of Mr. GRAY, seconded by Mr. REID, Whickham, Messrs. T. Bell, H. Wallace, Jacob Wilson, and John Henderson were appointed an Education Committee.

In relation to the Valuation Bill the following resolutions were carried:—

1. That, in the opinion of this club, it is not desirable that the surveyor of taxes should have anything to do with the Bill whatever; and that the fourth schedule is not a practicable basis; for the reductions ought to be one-sixth for houses, other than farmhouses, and manufactories, &c., and one-twelfth for lands, which should include both farmhouses and buildings; also that the local member be requested to support the above resolution, and to oppose an amendment, of which notice has been given to the effect that all mines, with the exception of tin, lead, and copper, be exempt from rateable value.

2. That it be a recommendation that the following portion of the 85th clause be omitted from the bill, viz: "Where the person entitled to the rent charge is so entitled as the incumbent of an ecclesiastical benefice, and the circumstances of that benefice are such that, in addition to the personal services rendered by the incumbent, the employment of any curate or curates is required by the Bishop of the Diocese, or otherwise necessary for the due performance of the duties of the benefice, there shall be deducted, in calculating the rateable value of such rent charge, the salary of the curate or curates actually employed and paid out of such rent charge."

The SECRETARY called attention to the Rivers Conservancy Bill, and said that all members, or nearly so, of the boards were to be landowners; while the incidence of the rates was to be divided between the owners and the occupiers. He thought it an owners' question entirely, and not an occupiers'; and wherever there was a Conservancy rate it ought to be paid altogether by the owners. He moved a resolution in the sense of his remarks.

Mr. REID seconded the resolution, and it was carried unanimously.

## STOWMARKET.

The last meeting of the Stowmarket Club was held recently, Mr. R. J. Pettitward, President, in the chair. Mr. Fisk, of Whitton, read a paper entitled "A Glance at the present depressed state of Agriculture; can it be relieved either legislatively or otherwise?" He thought some relief might

be obtained by a reduction of rents and other expenses, and recommended the laying down of enough pasture to enable a farmer to dispense with a man and a pair of horses. He added :—"Looking at our question from a legislative point of view, I am afraid we must not expect much. The reception which Mr. Samuelson's motion so recently met with in the House of Commons warns us not to be too sanguine of assistance from the present Government, although virtually said to be the farmers' friends. I have hitherto been opposed to the repeal of the malt-tax, as I thought it would be of no benefit to farmers; but since the introduction of sugar into the brewing trade I have come to a different conclusion. I now consider the malt-tax should be reduced, with a view to its ultimate repeal; and, further, that all beer for sale should be made from malt and hops. The Game Laws set very badly in many districts, and require to be carefully revised. But, of course, you must have laws as to trespass, the rights of owners and occupiers being fairly defined. We also require such a tenant-right as shall put the owner and occupier on equal terms; but this is a subject that of itself deserves the gravest attention, and to which you might fairly devote an evening. At present, the legislation in this direction have given us nothing but an abortion. There are other matters that might be named, but I think we have ample for any discussion you may wish to enter into. Before I conclude I would warn you to entertain no thought of retards to protection—or, as it is now called, reciprocity—that you may take for granted is gone for ever; and however unpleasant it may be for us as producers to contemplate, still it is certain the people of this country must be cheaply fed. Upon this mainly depends whether the general prosperity of the country will again be established. No doubt wages of all kinds have seen their highest point, and if the manufacturing, mining, and commercial interests of this kingdom are to be again successful, they will have to be carried out at a better and cheaper rate, or other countries will take the position we have hitherto held. As they, the manufacturers, are our customers, it is to our interest that they succeed.

## Chambers of Agriculture.

### CENTRAL.

The monthly meeting of the Council was held on April 8th at the rooms of the Society of Arts, Adelphi, the chair being occupied by the President, the Marquis of Huntly.

At the commencement of the proceedings the Treasurer (Mr. Clay) informed the Council that after cheques had been drawn for necessary disbursements to the amount of £29 15s. 10d., there would remain a balance in hand of £209 16s. 11d. He congratulated the Council on the improved position of the finances, adding that there was then due from local Chambers £104, and from members £89.

Mr. D. LONG moved a vote of thanks to the Marquis of Huntly for the lucid manner in which he had brought the question of agricultural distress before the House of Lords on the 28th of March.

Mr. NEILD seconded the motion, which was put by the Secretary (Capt. Craigie) and carried by acclamation.

The CHAIRMAN, in returning thanks, said at the present time agriculture was in a very low state in this country, and he advised them all to set their shoulders to the wheel. They could not do anything to interfere with free trade, and the question was in what direction they could look for relief. He considered that the agricultural classes were not fairly treated with regard to the incidence of taxation, and he thought that by and by if they worked together the land would probably derive some relief. He would do everything in his power to assist the agricultural interest.

The SECRETARY read the following resolution of the Gloucestershire Chamber, which had been forwarded to the Council :—"That in the opinion of this Chamber it is desirable that the cause of the present agricultural depression should be taken into consideration and discussed at the Central Chamber of Agriculture."

The CHAIRMAN: What answer should be given?

Mr. NEILD: It is the question of questions, my lord (Hear, hear).

The CHAIRMAN said he would suggest that the whole question should be raised at the next meeting of the Council.

The Report of the Taxation Committee was presented.

On the motion of Mr. STARTIN, the Chairman of the Committee, Mr. PELL, M.P., being absent, the Report was received.

Mr. BENI, in the absence of Mr. P. Phipps, M.P., Chairman of the Education Committee, presented the following Report :—

"Your Committee have to report that the Secretary of the Central Chamber of Agriculture has received the following reply to the memorial presented by the Council to the Science and Art Department :—

"Science and Art Department, London, S.W.,

18th day of February, 1879:

"SIR.—I am directed to inform you that the Lords of the Committee of Council on Education have had under their careful consideration the letter of the 28th January, signed by the Marquis of Huntly, Mr. Pickering Phipps, and yourself. Their Lordships desire me to say that a special course of instruction in agriculture will, if possible, be given this summer for teachers, provided that a sufficient number of approved candidates apply. It would not, however, be possible to give the students at present in training at South Kensington such a course, as their time is fully occupied in going through the course of the Royal School of Mines. With regard to the third point raised in your letter, my Lords believe that the calls on the Training Colleges are quite as large as they can meet. It would, therefore, be very unadvisable to add instruction in an applied science to those fundamental branches of science which may be now included in the Training College curriculum.—I am, Sir, your obedient servant,

"NORMAN MACLEOD."

"Your Committee, impressed with the importance of giving publicity to the intentions of the Department, requested their Chairman to put a question in the House of Commons to the Vice-President of the Council, asking what steps were being taken to make known the intentions of the Science and Art Department to offer teachers a special course of instruction in agricultural science at South Kensington this summer. In reply, Lord George Hamilton said :—"We propose to send a circular on the subject to all the science schools and classes in the country, and if the hon. gentleman, as Chairman of the Education Committee of the Central Chamber of Agriculture, would co-operate with us, I have no doubt the proposed instruction and system in aid of the Department will become widely known." At the instance of your Committee a suggestion was made to and adopted by the Royal Agricultural Society that the examination for the junior scholarships of the Society be in future open to any students passing the primary examination in the principles of agriculture under the scheme of the Science and Art Department, subject to the existing conditions applying to such scholarships. The Royal Agricultural Society have also recommended the Department to accept the diploma of the Cirencester College or the first-class certificate of the Society as a qualification for the position of Science teachers. Your Committee are glad to see that various local Chambers have followed their recommendations and have taken steps to promote the formation of classes in their several localities. Meetings of the Shropshire, Warwickshire, and Cirencester Chambers have been addressed by Mr. Buckmaster, and the scheme discussed. The Newcastle Farmers' Club, in addition to establishing a science class, have deposited the sum of £25 for a local exhibition. This amount will be supplemented by an equal contribution from the Education Department. Your Committee hope that similar bodies will avail themselves of the privileges offered by the Government to carry further the primary instruction received in the science classes by a higher course in an advanced school. Your Committee are glad to call attention to the readiness of the Department and the Royal Agricultural Society to co-operate in the endeavour to promote the success of the new scheme, and to increase the supply of properly qualified teachers, which, as your Committee have already pointed out, has been hitherto the chief difficulty to the more general establishment of agricultural science classes throughout the country. With a view to utilising the services of the certificated teachers throughout the country, your Committee recommend that they be empowered by the Council to communicate with teachers' unions and other educational centres making known the advantages offered by Government, with special reference to the course of instruction on agricultural science to be given to teachers this summer at South Kensington."

Mr. BELL having moved and Mr. ADKINS seconded the reception of this report,

The CHAIRMAN expressed a hope that the recommendation at the close would not be forgotten.

Mr. St. JOHN ACKERS said the Gloucestershire Chamber had appointed a special Education Committee, which was composed of practical farmers, so that it was not likely that mere theories would be taught. He thought the diploma of the Cirencester College was too much for teachers to aim at, very few having ever obtained it, and in his opinion it would be better to think only of a high-class certificate from such a college.

Mr. ARKELL complained that the College referred to had not been used, as was originally intended, for the education of sons of practical farmers.

The Marquis of RIFON expressed his satisfaction that the subject of scientific agricultural education was exciting such general interest, and hoped that it would be extended throughout the country, and would prove very useful in practical farming.

After a few remarks from Mr. BELL the motion was adopted.

The next subject on the agenda, being the Rivers Conservancy Bill,

Mr. TROTTER said he was sorry to state that the meeting of the Lincolnshire Chamber, which he represented, in the previous week, there was not time to consider that Bill; but it was a very important measure for Lincolnshire, and a resolution was passed expressing general approval of it without referring to details. He thought the area of taxation should be made as wide as possible, and the Bill was of such a wide character that latent powers might be used for that purpose. The uplands would be brought under taxation, but only according to the amount of benefit which they received. The lowlands of Lincolnshire embraced several hundred thousand acres, and what was chiefly wanted was an authority which would enable them to get a large outfall into the sea. There had been a large expenditure upon different works, but the outfall was insufficient, and that Bill would confer the requisite powers for securing an efficient system of drainage which would include a good outfall. He concluded by moving the following resolution:—"That this Council regards with satisfaction the introduction of a measure to provide for the Conservancy of Rivers, but is unable to pledge itself to the details of the Bill brought into the House of Lords." The words "so far as regards the constitution of the boards, the incidence of the rates, and the taxation of uplands," which the Business Committee had added, Mr. Trotter said he did not approve of and therefore could not adopt.

Mr. NEILD having seconded the resolution in this limited form,

Mr. WILLSON proposed an amendment consisting of the words moved by Mr. Trotter, with the additional ones which he had discarded.

Captain CRAIGIE said, in reply to Mr. STOREY, M.P., that enquiries on the subject were addressed to all the local chambers, and that replies had been received from 5 or 6. The Doncaster Chamber had passed a resolution declaring that it would be very unfair to assess the high lands for benefits that were obtained by the low lands; and the Notts Chamber had passed a similar resolution. He then read the resolution of which Lord Redesdale had given notice in the House of Lords to the effect that it would be unjust that A's property should be taxed for the benefit of B's property when his land would not receive any benefit from the outfall.

Mr. STOREY, M.P. thought there would be great injustice in calling upon all to contribute, the large portion of the low lands of Lincolnshire was purchased for as little as 25 an acre, because it was flooded, and it was now worth £100 an acre.

The Marquis of RIFON said he appeared at that meeting as a special representative of the Lincolnshire Chamber, although they did not at the last meeting come to any definite resolution; but any remarks he might make he wished to be taken as his own opinion, except so far that in the month of January last the Chamber at their annual meeting, fully considered the subject of conservancy, and expressed themselves in favour of the recommendations of the report of the Lords in 1877, upon which the present Bill was founded. One important question in connection with this subject was whether any portion of taxation in respect to the conservancy of rivers should be

thrown upon the uplands, and he thought that there would be no injustice in that inasmuch as the low lands had been affected by the improved drainage of the uplands. He could not regard the constitution of the board, as proposed by the Bill, as satisfactory, because it did not give their due share of representation to the occupiers of land. According to the Bill, one-third of the members of the board were to be owners of land, and it was proposed that the remaining two-thirds should be elected by the central bodies. He would strongly urge that they should take care so far as they could by using all their influence that all the occupiers of land had their full and fair representation on the board. He would suggest that power should be taken in the Bill to divide the branch districts of the Conservancy Board into sub-districts, at each of which there should be a sub-district board elected by the ratepayers which would send representatives to the Conservancy Board. The fight on this Bill would turn on the question of rating the uplands, and in his opinion the claim of the lowlands against the uplands was just and reasonable. He thought the constitution of the board must be amended. It was a matter of regret to him that he should be obliged by the justice of the case to be a party to the imposition of fresh burdens on the rates, well knowing what the burdens were already; but it was satisfactory to him to see the adoption of the principle of dividing the rating between owners and occupiers, and he wished that principle, which appeared to him a sound one, had been adopted in various rating Bills of earlier origin.

Mr. H. BIDDLEL asked what was to be the area of the incidence of taxation under the Bill.

The Marquis of RIFON replied that it would be the whole district of the Conservancy Board. What was contemplated was that the Board should have to do with the whole of the water-shed of the river, and therefore the area of taxation would probably include the whole of the water-shed. There appeared to be some misunderstanding with regard to the nature of the Bill. It seemed to be supposed that, if it passed, rates would at once be imposed on the whole country; whereas it was simply a permissive Bill, enabling provisional orders to be made, after proper inquiry, by the Local Government Board, which provisional orders would require the sanction of Parliament. If he had anything to do with the administration of such a measure, which it was not at all likely he would have, he should proceed cautiously and tentatively.

Mr. H. BIDDLEL said he should object to being taxed for the benefit of land which he did not live near. He did not see why he should be called upon to contribute for the improvement of land merely because his water ran into a channel which it always had run into.

Mr. D. LONG said he had a great deal of land which was liable to be flooded in Worcestershire, from 100 to 300 acres having been flooded 14 times last year. A Drainage Act had raised the rating of that land 12s. 6d. an acre, and he was afraid that if engineers were employed to make a better outfall it would be raised 12s. 6d. more.

Mr. ARKELL said the sub-division of districts of which the Marquis of Ripon had spoken, had already been carried out on the district of the Thames towards Oxford, and the only drawback was that they had to deal with the London conservators, who did nothing in the way of improvement.

Mr. C. S. READ, M.P., said he quite agreed with the noble Marquis that those who carried out the measure ought to proceed in a tentative way, and to do nothing rashly, because he felt sure that in nine cases out of ten the fault lay in the valley itself and not in the uplands (Hear, hear). The question was whether the uplands ought to be rated. On that point he might remark that there were thousands and thousands of acres of porous subsoil on which a drop of water had never been seen to stand for five minutes.

Mr. W. MAREHALL (President of the Cambridge and Isle of Ely Chamber) said he represented an exceptional district—the valley or water-shed of the Ouse—comprising 1,500,000 acres of uplands and about 2,500,000 acres of low lands. The 1,500,000 acres extended for thirty miles beneath the level of the sea before the land found its debouchment in the estuary of the Wash. In that district the owners had for the last 250 years been obliged to expend a great deal of money to protect themselves against the flooding, and it would be most unfair to call upon them to pay rates on account of land which had been subject to no such outlay. They would be

overlooked on the Board and altogether crushed unless Parliament gave them distinct protection.

The CHAIRMAN said he had taken great interest in that question. He wished to say a few words before putting the resolution. He was in favour of a certain proportion of the rates being levied upon the uplands; and he might remark that those who took an opposite view seemed to forget that they would have an opportunity of stating their case to the Local Government Board before any provisional Order was issued, and that the rates might be limited to one-fourth on a certain class of lands, or there might even be total exemption. He believed that the owners and occupiers of the uplands would be quite capable of protecting their own interests on the Conservancy Board, as they would probably gain a majority.

After a few remarks from Mr. WILLSON the resolution proposed by him was put and carried by a large majority.

Mr. STOREY, M.P., then introduced the next subject on the agenda considering the Malt Tax, recapitulating all the chief arguments that have generally been argued in favour of the repeal of that tax, and pointing out that when barley was at 21s. per quarter the duty on malt was 50 per cent., and that when it was as it had been recently in his own county at 32s. the duty was 75 per cent. He also dwelt upon the hardship of the duty towards farmers who were large consumers of beer; in consequence of their being under the necessity of giving a great deal to their men at different seasons. As regarded the feeding qualities of malt, what he contended was that it was a useful condiment and that they ought not to be precluded from using it. Three remedial measures had been suggested; one to enforce a customs duty on barley, another to enforce an *ad valorem* excise duty on malt, and the third to substitute a beer duty for the malt duty. The last was a practical suggestion, and he hoped that some Chancellor of the Exchequer would take it into consideration. Those who told them in plain language that they should not think of a return to protection ought to be the first to assist them to secure the abolition of the malt tax.

Mr. LEXWOOD compared the duty on malt with that on tea, and contended that tea was by far the least heavily taxed, the duty on a gallon of liquid tea being, he maintained, only three farthings, while that on a gallon of beer was nearly two-pence.

Mr. C. S. READ, M.P., moved the following resolution: "That this Council is of opinion that the tax on malt is contrary to every sound principle of taxation, and ought to be repealed, and that a tax on beer, of a sufficiently large amount to prevent possible loss of revenue, might with advantage be imposed in lieu thereof." The hon. gentleman began by running through various reasons why the malt tax question had ceased to interest the public generally, one of these being that indirect taxation had been so greatly diminished that labouring people now paid no taxes at all except upon beer, spirits, tea, and tobacco. In 1852 the present Premier was turned out of office in consequence of his having proposed to remit half the malt-tax, and if he was to make a similar proposition now he would be turned out with greater ignominy.

Mr. STARTIN, in seconding the resolution, condemned the use of sugar instead of malt as being injurious to the consumer, because it yielded a larger proportion of alcohol without the nitrogenous matter contained in malt, and maintained that as the taxes on the last two articles were levied there was a large differential duty in favour of sugar.

The resolution having been supported by Mr. BIDDELL, Mr. HADSOLL, Mr. NEILD, and Mr. ARKELL, the last mentioned gentleman remarking incidentally that as he was travelling up to London from Gloucestershire that morning he was told of one estate on his route where thirty-three tenants had given the landlord notice that they would give up possession.

The CHAIRMAN said he wished to quote a remark made by Mr. Disraeli, now Lord Beaconsfield, on that subject. He said, "That this tax is injurious to the farmer, I do not think any one can for a moment deny. That it is a tax upon the consumer is no answer to this complaint. All our taxes are taxes upon the consumer; but that this tax restricts the demand for the farmer's produce is what no one scarcely can question." After that admission they might well appeal to the Prime Minister for his assistance as regarded the malt duty. (Hear, hear.) The argument that that tax was opposed to free trade was a very sound argument. There

could be no doubt that it restricted the farmer in the employment of what he produced, and hence it was contrary to the very spirit of free trade (Hear, hear).

The resolution was then put and carried unanimously.

The proceedings terminated with a vote of thanks to the Marquis of Huntly as the Chairman.

## CAMBRIDGE.

There was a meeting of the Cambridge and Isle of Ely Chamber of Agriculture on April 19, at Cambridge, to consider the Rivers Conservancy Bill; Mr. W. Marshall, of Ely, presiding. The measure had the approval of some members, but was adversely criticised by others, more particularly by those interested in and practically acquainted with the gigantic drainage works in the fens. It seems to be desired that the fens may be exempted from the operation of the Bill, or failing this that equitable terms may be obtained for those who have at great expense and labour converted the fen country from a swamp into an English delta.

The following resolution, proposed by Mr. O. CLAUDE BELL, was adopted by the Chamber:—

"That this Chamber regards with interest the Rivers Conservancy Bill, which in many parts of England may be found to meet the wants of those localities, but is satisfied that before it can be applied with justice to the valleys of the rivers Ouse and Nene, and the other Fen rivers which empty into the great estuary of the Wash, the vast tracts of fen land lying above the outfalls of those rivers must be taken out of the class of 'flood lands' mentioned in the Bill, or otherwise that in settling the incidence of taxation upon those lands not only the large sums of money heretofore expended by the owners of such lands in embanking and improving such rivers, but also the present heavy taxation necessary for maintaining the present works ought to be taken into careful consideration." It was further resolved, "That such uplands as require no drainage should be exempted from taxation."

## DEVONSHIRE.

Earl Fortescue presided at Exeter on Friday, April 19th, the quarterly meeting of the Devonshire Chamber of Agriculture, when the Valuation of Property Bill now before the House of Commons was considered. It was decided to petition Parliament in favour of immediate procedure with the Bill, and for the substitution of an appeal to the proposed county authority instead of the Quarter Sessions. A petition against the proposed registration of cowkeepers was also agreed upon.

## NORFOLK.

A special general meeting of the members of this Chamber was held at Lincoln recently. The chair was taken by the Vice president Mr. T. Trotter.

The Rivers Conservancy Bill was the first set down for discussion.

After some discussion, several resolutions before the meeting were withdrawn until further discussion, the members present considering the resolution passed on the 28th sufficient until after further progress has been made by Parliament. Another meeting to be held on an early day is to be hereafter arranged.

It was then resolved unanimously, upon the motion of Mr. CHAS. BRAMLEY, seconded by Mr. C. F. PADDISON, "That this Chamber considers that the formation of County Boards, with the restricted powers provided for in the Bill as recently introduced into the House of Commons, would increase the county expenditure without securing any corresponding benefit; yet the Chamber believe that the establishment of County Boards with more extensive powers as a Central Authority is urgently required."

It was further resolved unanimously, upon the motion of Mr. MARSHALL HEANLEY, seconded by Mr. WALTER DUDDING, "That this Chamber supports the opinion of the Central Chamber that the malt-tax is opposed to every sound principle of finance, and ought to be repealed, and that the tax now levied on malt might with advantage be levied on beer."

## Literary Notices.

**DIXON'S LAW OF THE FARM.** London: Stevens and Sons.—This well-known work of reference now appears in its fourth edition, revised and added to by Mr. Perkins, barrister-at-law. The most important legal decisions affecting agriculturists (curiously printed "agriculturalists" in the preface) given up to the end of 1878 are now included in the book, and an exposition of that wonderful "law of the farm," the Agricultural Holdings Act, is also added. Thus the book is now more complete and valuable than ever, and if there were such a thing as a "complete" library, the common saying as to no country gentleman's library being complete without "The Law of the Farm" would certainly be warrantable. The first chapter gives an account of the agricultural customs of the different counties of England and Wales, which, as far as we have tested it, appears to be as correct as it is clear and concise. But the chapter opens with the astonishing statement:—"If the Agricultural Holdings Act were universally adopted, the term 'custom of the country' . . . would cease to exist." Now, the Agricultural Holdings Act does not touch the principal items dealt with under the "custom of the country," such as payments for fallow, growing crops, straw, hay, &c., so that if that measure were as generally adopted as it is generally rejected, the custom of the country would still have a large scope in the direction of farm valuations. This slip, as we may fairly regard it, does not detract from the value of the book, which appears to be a nearly exhaustive treatise upon all questions of law relating to agriculture, in which respect it is the most valuable work of its kind at present published.

**THE LAW RELATING TO WEIGHTS, MEASURES AND WEIGHING MACHINES.** By G. C. Whiteley, M.A., Barrister-at-Law. London: Knight and Co.—Mr. Whiteley has given us a very useful compendium of the legal obligations which regulate the use of weights and measures. The provisions of the Weights and Measures Act, 1878, which is given entire, are clearly explained by notes appended to the different sections. The book also contains a great deal of information as to standards of measure, length, weight, and capacity; the Metric System, the administration of the law and the penalties attaching to its infringement, the sale of coals and bread, the law as it affects Scotland and Ireland, and other matters of a miscellaneous character. It will be of great service to business men, including, of course, farmers.

**LESSONS IN HORSE JUDGING.** By William Fearnley. London: Chapman and Hall.—The author of this book was formerly Principal of the Edinburgh Veterinary College, and Lecturer on Veterinary Surgery, as well as Examiner in Anatomy to the Highland and Agricultural Society. He is also the author of "Lectures on the Examination of Horses as to Soundness, and he therefore comes before the public in the present venture with very high credentials. His object is, as he tells us in his preface, "to place on a rational basis a subject that has hitherto been taught dogmatically, if indeed it can be truly said to have ever been taught at all. We cannot at all agree with the author when he suggests that the Government should take 'under its entire control the selection of breeding stock, at least in the case of horse flesh;' but that is a matter which does not at all affect the value of the work, which appears to us to be well calculated to instruct its readers in the difficult art of buying horses, as well as judging them. The subject is treated on a thoroughly scientific basis, and is illustrated by diagrams.

**AMERICAN BERKSHIRE RECORD.** Springfield, Ill., U.S.A.: The American Berkshire Association. This

is the third volume of the "Record," and it contains the pedigrees of 1,350 animals owned by upwards of 400 breeders. Amongst other particulars, it gives a table showing the geographical distribution of Berkshire pigs as recorded in the three volumes published. A great many English breeders have entered their pigs in the "Record," which is a valuable means of increasing the fame and promoting the excellence of the breed. The Secretary states in a paper prefixed to the record of the animals:—"To England must always be given the honour of having been the original home of the Berkshire; but America, with its great natural advantages in soil and climate, may soon become the most noted portion of the world for the production of Berkshires of the highest type of excellence."

**THE AGRICULTURAL LEASE.** By a Director of the Scottish Chamber of Agriculture. Dumfries: Johnston and Son.—It is no secret that the author of this pamphlet is Mr. McCulloch, of Denbie Mains, Lockerbie, who recently gained the Highland and Agricultural Society's premium of £25 for the best historical essay on the lease. In the pamphlet before us Mr. McCulloch traces the history of the lease from the earliest times; but the chief interest of his essay lies in his remarks upon modern leases and his suggestions for their improvement on the one hand or disuse in favour of a yearly tenure with compensatory allowances for improvements on the other. As we make some reference to this subject in our leading columns to-day, we need not do more here than recommend the pamphlet to our readers.

**HOW TO LAY DOWN LAND TO GRASS.** London: James Carter and Co.—This essay, written for Messrs. Carter and Co., of High Holborn, is one of peculiar interest at the present time, when so many farmers are trying to get away from overwhelming expenses by laying down some of their land in permanent pasture. Without discussing the doubtful expediency of taking this course as a general rule, it must be admitted that where land is suitable for permanent pasture, tenants who are suffering from the necessity of farming out a long lease at a high rent, and therefore cannot get away from one of the most serious of their expenses, may most easily gain relief by letting a portion of their land go out of arable cultivation, for a time at least. But, apart from this question, which arises out of the peculiar agricultural depression of the present time, there are always cases in which it is desirable to lay land down to grass, and an essay like that before us is a very useful guide to those who have such an intention. In Messrs. Carter's essay directions are carefully given as to the preparation of the land, the quantity of seed to be sown, and the after treatment of the young pasture. But the peculiar value of the essay consists in the instruction for using certain varieties of grasses in different districts, according to the geological formation of the soil. The country is verbally mapped out in accordance with the prevailing soils of each portion of it, and separate mixtures of grasses suitable to each are named.

**RECIPROCITY.** By Sir Louis Mallet, C.B. London: Cassell and Co., for the Cobden Club. The leading fallacies of the new Reciprocity party are ably exposed in this pamphlet, which is written in the form of a letter to the Chairman to the Cobden Club. Sir Louis Mallett is a high authority on the subject, and we hope his letter will be widely read.

**THE CHEMISTRY OF COMMON LIFE.** By J. F. W. JOHNSTON and A. H. CHURCH. London: Blackwood and Sons.—No popular scientific work that has ever been published has been more generally and deservedly appreciated than the late Professor Johnston's "Chemistry of Common Life." First introduced to the

public twenty-five years ago, it has ever since remained unrivalled as a clear, interesting, comprehensive, and exact treatise upon the important subjects with which it deals. It is not too much to say that by this, the great work of a most useful and scientific career, Professor Johnston brought a general knowledge of chemistry within the reach of general readers, and, by so doing, he did service of the highest value to the public of his own and of succeeding generations. But lapse of time necessarily brings new discoveries in all branches of science, and also corrects theories once held to be the best guesses at truth, but since disproved. We gladly welcome, therefore, a new edition of this book, revised and added to so as to render it co-comprehensive and harmonious with the knowledge of the present time, in relation to its subjects, by Professor Church, late—alas that we must say *late*!—of Cirencester College. Professor Church has done his work of revision and addition well, and he has done it all the better because he has altered as little as possible, with due regard to correctness, and has reverently preserved the style and method of the author. The one entirely new chapter which he has introduced, on "The Colours we Admire," is a valuable and exceedingly interesting supplement to kindred subjects dealt with by Professor Johnston. The book is one which not only every student but every educated person who lives should read, and keep to refer to if he can afford to buy it.

**JOURNAL OF THE ROYAL AGRICULTURAL SOCIETY, Vol. 18, Part I.**—The new number of the *Journal* contains several papers of great interest. After the usual meteorological and agricultural statistics the first article is the Report on the Farm Competition of 1878, by Frederick Beard; and this is followed by a Report on the System of Cheese-making practised on the Four Prize Dairy Farms, and by three reports on the exhibits at the Bristol meeting of the Society. We next come to "The Agricultural Features of the Paris Exhibition," by William and James Macdonald, which is a well-written and exhaustive account of all that was most worthy of notice in the agricultural departments and live stock of the great World's Show, held on the other side of the Channel last summer. In his "Report on the Dairy-farming of the North-west of France," Mr. H. M. Jenkins gives the result of his observations made during a lengthened visit to the districts comprised in that great agricultural portion of France which includes Normandy, Brittany, Picardy, and Solesne. This paper is full of information as to the cattle and dairy system of France, and it will be read with great interest by the dairy farmers of England. One of the most interesting and important of the contributions is Dr. Burdon Sanderson's concluding report of the experiments on pleuro-pneumonia at the Brown Institution. We have elsewhere commented on this report at greater length than it would be convenient to go to in this notice; but we may here remark that the result of the experiments is such as to render it a subject of very great regret that any difficulties or expense should have been allowed to prevent their repetition, as conclusions of the utmost importance might have been arrived at if they had been continued. Dr. Voelcker's "Report on the Field Experiments at Woburn" is another important paper which, like the last, deserves appreciative notice in a brief review. The Annual Report of the Consulting Chemist concludes the number.

**PATENTS FOR INVENTIONS.** Edited by H. R. LACK.—London: The Commissioners of Patents' Sale Department.—The two volumes before us contain abridgements of specifications for barn and farmyard implements, from 1836 to 1866; and those relating to

field implement, from 1867 to 1876. Some time back we noticed the issue of the first volume on field implement patents, which contained abridgements of specifications from the earliest date to the year 1866. These abridgements collected thus in handy volumes, classified, and indexed, are very useful to inventors; while some of the particulars of old inventions are interesting to the agriculturist and the antiquarian.

**THE PLEASURES AND PROFITS OF OUR LITTLE POULTRY FARM.** London: Chapman and Hall.—Poultry-keepers will read with interest this account of a successful venture in poultry farming. The authors also kept bees and pigs with profit, and made money out of their garden. As to the poultry, the most extraordinary prices were obtained for both birds and eggs, so that it was no wonder there was a large profit. The little book is very pleasant reading.

*Gardening* is a new illustrated weekly paper sold at a penny, and intended to cater chiefly for people who have small gardens and who do not feel disposed to take the more expensive gardening journals. It is published by Brook and Ford, Southampton-street.

**ADVICE TO NEWSPAPER CORRESPONDENTS.**—The *Burlington Hawkeye* gives the following directions to its correspondents as to the manner of supplying manuscript:—Never write with pen or ink. It is altogether too plain, and doesn't hold the mind of the editor and printers closely enough their work. If you are compelled to use ink, never use that vulgarity known as the blotting pad. If you drop a blot of ink on the paper lick it off. The intelligent compositor loves nothing so dearly as to read through the smear this will make across twenty or thirty words. We have seen him hang over such a piece of copy half-an-hour, swearing like a pirate all the time—he felt that good. Don't punctuate. We prefer to punctuate all manuscripts sent to us. And don't use capitals. Then we punctuate and capitalise to suit ourselves, and your article when you see it in print, will astonish, even if it doesn't please you. Don't try to write too plainly. It is a sign of plebeian origin and State school breeding. Poor writing is an indication of genius. It is about the only indication of genius that a great many men possess. Scrawl your article with your eyes shut, and make every word as illegible as you can. We get the same price for it from the ragman as though it were covered with copperplate sentences. Avoid all painstaking with proper names. We know the full name of every man, woman, and child, in the United States, and the merest hint of the name is sufficient. For instance, if you write a character something like a drunken letter "S," and then draw a wavy line, we will know at once that you mean Samuel Morrison, even though you may think you mean Lemuel Messenger. It is a great mistake that proper names should be written plainly. Always write on both sides of the paper, and when you have filled up both sides of every page, trail a line up and down every margin, and back to the top of the first page, closing your article by writing the signature just above the date. How we do love to get hold of articles written in this style! And how we would like to get hold of the man that sends them! Just for ten minutes. Alone. In the woods, with a revolver in our hip pocket. Revenge is sweet, yum, yum, yum. Lay your paper on the ground when you write; the rougher the ground the better. Coarse brown wrapping paper is the best for writing your articles on. If you can tear down an old circus poster, and write on the paste side of it with a pen stick, it will do still better. When your article is completed, crumple your paper in your pocket, and carry it two or three days before sending it. This rubs off all superfluous pencil marks, and makes it lighter to handle. If you can think of it, lose one page out of the middle of your article. We can easily supply what is missing, and we love to do it. We have nothing else to do.

Ingratitude is strongest in a coroner. You may do him every kindness, and yet you can't tell what moment he will sit on you.



## THE REPORT OF THE VETERINARY DEPARTMENT FOR 1878.

The Annual Report of the Veterinary Department of the Privy Council Office for the year 1878 has been issued by Professor Brown. It commences with a history of legislation in respect of contagious cattle-diseases during the past year, a subject with which our readers have already been made fully acquainted. Details are given of the various ways in which Local Authorities have contrived to act in a manner foreign to the letter and the spirit of the Act of 1878, from misapprehending the scope and misunderstanding the meaning of its provisions. For example, a Local Authority, in its wisdom, directed the Veterinary Inspector not to visit animals affected with Foot-and-Mouth Disease unless under the special authorisation of the sub-committee, who were directed to give such authorisation "only when they had reason to suspect that the disease was more serious in its nature than Foot-and-Mouth Disease, and in no other case." Other Local Authorities have interpreted the Cleansing and Disinfecting Order of 1878 to mean that cleansing and disinfecting are to be carried out at the expense of owners or occupiers, which is not the case. In some instances Local Authorities have issued notices that no compensation would be made in the case of animals slaughtered by their orders if the said animals had been introduced on to the premises within a specified period before they were attacked by the disease; whereas no power has been given to Local Authorities to withhold compensation under the circumstances. A common form of error appears to have been in reference to the declaration of infected "places" and "areas," and as this is an important matter we give the following explanation in the words of the Report:—"The object of declaring an infected place is to shut up, within well-defined limits, all the animals which have been exposed to infection. The declaration of an Inspector is a provisional measure which is to be applied at once to the cowshed, field, or other place where disease is found to exist or to have existed, but the Local Authority, on receipt of the Inspector's declaration, are to institute an inquiry with the assistance of a Veterinary Inspector, or a person qualified according to the Act to be such. When the inquiry is completed the Local Authority are required to determine and declare, and, in the light of the knowledge gained during the inquiry, to prescribe, the limits of the infected place. When the Local Authority have proceeded as above described, and not before, they are required to report to the Privy Council the declaration of the Inspector and their own proceedings thereon, and to state whether or not it is in their opinion expedient that an 'infected area' comprising the 'infected place' be declared, and any market or fair held within that area restricted or prohibited, by Order of Council. An area cannot be declared infected otherwise than by Order of Council, and the necessity for such an Order would only arise under special circumstances. If, for example, a Local Authority should find reason to suspect that diseased or infected animals had been moved from

one place to others within a limited radius, probably extending a mile from an infected place, or if there were within that radius several centres of infection and a considerable cattle population, it might be desirable to restrict the movement of animals into, within, and out of the infected area; and in such case the declaration of an 'infected area' by the Privy Council would give the Local Authority the necessary power to act." This is very explicit, as indeed is the Act itself, with regard to these provisions. Other cases of erroneous action on the part of Local Authorities are given in respect of declaring infected areas; extending the limits of infected places so as to include public slaughter-houses; declaring infected places in cases of Sheep-scab and of Glanders, for which no such provisions exist; applying for power outside the scope of the Act of 1878; and failing to appoint a Veterinary Inspector. The Report says:—"Notwithstanding the emphatic terms of this section (of the Act), some Local Authorities have intimated that they did not consider it necessary to appoint a Veterinary Inspector in their district, as no disease existed!" In fact, the unhappy Local Authorities have done things they ought not to have done, and left undone things they ought to have done in a most sinful manner, just as we expected from the first that they would do, judging from their action under the former Act. In case of an extensive and general outbreak of disease—one of Professor Brown's cycles of Foot-and-Mouth Disease for example—we should not be at all surprised if the Privy Council found Local Authorities to be utterly unworkable and unmanageable.

The whole of the existing Orders in Council—which will be found in the *Mark Lane Express* of January 8th—have been issued under the Act of 1878, including that for the prohibition of cattle from Germany and Belgium. These countries were not mentioned in the Act of 1878, nor in the Foreign Animals Order of December 6th, 1878, but they were provided for in the Order of January 27th, 1877, for which is now substituted the Order of December 17th, 1878, by which the prohibition is continued. Schleswig-Holstein is always dealt with separately from the rest of Germany, and the order which is regularly made in favour of Schleswig-Holstein (when her export trade begins) was revoked on the 7th of December (when it was over), "on account of the outbreak of Cattle Plague in Germany." As that country has now been officially declared to be free from Cattle Plague, in the very nick of time, we may expect an Order in Council next month, as usual, in favour of Schleswig-Holstein.

The statistical portion of the Report, including its Appendix, is of great interest. With regard to diseases we find that between the dates September 1st, 1877, and October 1st, 1878, there were 3,722 cattle slaughtered in Great Britain on account of Pleuro-pneumonia, by order of Local Authorities, for which a sum of £22,912 7s. 11d. was paid as





States ports 2,034 cattle, 3,266 sheep, and 2,398 pigs were thrown overboard; 271 cattle, 313 sheep, and 394 pigs were landed dead; and 139 cattle, 192 sheep, and 285 pigs were so much injured during transit as to render it necessary to slaughter them at the place of landing. From Canadian ports 551 cattle, 2,000 sheep and 418 pigs were thrown overboard; 43 cattle, 172 sheep, and 17 pigs were landed dead; and 24 cattle, 68 sheep, and 10 pigs had to be slaughtered at the place of landing. Together, 10,667 animals were thrown overboard, 1,210 were landed dead, and 718 were killed at the place of landing on account of their injuries.

One more item from this interesting Blue-book must bring our notice to a close. The importations of foreign stock to the port of London during 1878 are shown to be in the following relationship to the total market supply of the Metropolis, and to the total importations of foreign stock into Great Britain during the same year. Foreign cattle form 42.208 per cent. of the total supply of cattle to London, and 38.808 per cent. of the total importation of cattle into Great Britain; foreign sheep form 49.421 per cent. of the total supply of sheep to London, and 82.758 per cent. of the total importation of sheep into Great Britain; and foreign pigs form 91.729 per cent. of the total supply of pigs to London, and 49.383 per cent. of the total importation of pigs into Great Britain.

The Privy Council replied to the request made by the Westmoreland and Durham Local Authorities to treat Ireland other than as an integral part of the United Kingdom with regard to cattle diseases, to the effect that it was not in accordance with the provisions of the Act, as we contended at the time. The Blue-book contains the Report on the transit of animals from Ireland to ports in Great Britain, and that of Professor Ferguson on the movement of animals intended for exportation from Ireland to Great Britain, as well as copious statistics, and much other valuable information.

**FLIGHT OF THE HARE.**—Our common hare is singularly well adapted for getting over the ground rapidly by the great length and powerful development of its hind legs. These organs are nearly twice as long as the fore limbs, and, as most of us are well aware, the bones composing them are set in motion by an enormous mass of solid muscle. Owing to their great preponderance the hare, when moving slowly in search of food, goes with a sort of lolling gait; but the moment here is occasion for him to move with rapidity, the disproportionate hind limbs stand him in good stead, as he shoots along over the ground by a series of long leaps, and with great swiftness. At the same time, it is observed that the length of the hind legs causes the hare to run with much greater facility uphill than down, and, in fact, it is said that in descending steep inclines the animal is obliged to run obliquely in order to escape over-balancing itself. When pursued, the hare has the art of making sudden turns in its course, known as "doubles" or "wrenches," by which the dogs in chase of it are brown out, for although most greyhounds are swifter of foot than a hare, they are incapable of changing their course so sharply, and thus, while they are carrying their own impetus, their inflexibility in a different direction. They are, in order to escape from their pursuers, able to make a considerable amount of ground in a few leaps, and also in a few bounds, and also in a few jumps. In fact, the hare will jump over a fence, and also over a ditch, and also over a stream. Mr. Cross rivers. Mr. Cross an arm of the history.

## THE FARMERS AND THEIR FRIENDS.

If ever there was a class which needed to be saved from its friends, it certainly is the farming class of the present day. Mr. Samuelson, in the House of Commons, recently proposed an inquiry into the operation of the Agricultural Holdings Act. Immediately he is met by a host of the supporters of the Farmers' Friend Government, who declare that no such enquiry is needed, and that the Act is working satisfactorily, though it is patent to the whole country that nine-tenths of the landed proprietors have contracted themselves out of its operation. This was a little too palpably false for Mr. Read, with all his Tory predilections, and he voted in favour of Mr. Samuelson's motion. But his new colleague, who had so recently given his solemn pledge to his constituency, that in all subjects relating to agriculture he should be guided by Mr. Read, utterly disregarding his pledge, was found supporting the Government in their opposition to Mr. Samuelson's very modest request in the interests of the farmers. Mr. Blennerhassett has given notice of his intention to move "That it is desirable that the power of distraint for the rent of agricultural holdings in England, Wales, and Ireland should be abolished," thus attacking one of the greatest causes of hindrance to the progress of agriculture by subjecting the tenant-farmer to fictitious competition in hiring his land and destroying his credit. Upon this, the tenant-farmer's representative and special friend, Mr. Read, intervenes with an amendment, which seems designed to render the motion as palatable to the landlord, and, therefore, as useless to the tenant as the Agricultural Holdings Act itself. We are at a loss to understand how the hon. gentleman reconciles this obstruction to the removal of restraint, with his recent vote on the question of Hypothesis, or his condemnation of the principle of that law in his speech at the Farmers' Club, in the discussion of Mr. Wrightson's paper on that subject. But Conservative reasoning was ever too subtle for our dull comprehension. Mr. Sidney Smith, another would-be farmers' friend, in a recent letter to the *Mark Lane Express*, asserts that the law of distraint has the effect of improving the farmer's credit! Well, it is certainly a novel mode of raising a man's credit to place a permanent lien upon his effects, and it is a notorious fact that the merchant, the tradesman, and the dealer, can all obtain pecuniary accommodation more easily than the farmer; the money lender being well aware of the prior claim of the landlord on his stock-in-trade. Mr. Smith's crowning argument against the abolition of distraint is that, in such cases, the land would only be cultivated by large capitalists! Well, then, here is the remedy for the complaint so generally laid against tenant-farmers, especially by landlords, that they do not bring capital enough to their business; and we agree very much with the admission of Mr. Smith, that nothing the Legislature can do would be more likely to attract additional capital to the cultivation of the land. But the unkindest cut of all is that given the farmers by the chief of the Government of "Farmers' Friends," who coolly tells men who are at their wits' end to find a sovereign to pay their debts, that the cause of their sufferings is an influx of gold!—which, however, he acknowledges, occurred some years since, and of which, we venture to think, the farmer was quite unconscious, though he is painfully aware of the depletion of cash, which the Premier assures him was certain to follow in the natural course of events. This farmers' oracle, however, carefully avoids any allusion to the *spirited foreign policy* of which he and his colleagues have been the authors, and which has undoubtedly had quite as much influence in bringing about the general depression in agriculture and all other peaceful pursuits as any of the causes to which he chooses ascribe it. The tenant-farmer seems to us to be in the unfortunate position of having no friends, which fully accounts for the many hard hits he has to bear. The Liberal party are suspicious and jealous of him, on account of his persistent adherence to the party who always strenuously oppose their programme of to-day as "peace, retrenchment, and reform;" and those who are his friends simply use him as a stepping-stone to their hesitating to kick down the ladder by which they got well aware from experience that they are in the Garrick of yore—

rew off his friends as a huntsman his pack,  
now when he liked he could whistle them back."

—*Amwich Mowery*.

compensation. Another part of the Report gives the number of cattle slaughtered on account of Pleuro-pneumonia in Great Britain during the year 1878 as 4,488, and 114 as having died. According to the return for the last week of the year 1878 there were only two "centres" of Foot-and-Mouth Disease in Great Britain, and the Report says "it is not unreasonable, therefore, to entertain a hope that under the stringent provisions of the Act of 1878 the affection may shortly be extinguished." In the first nine months of the year the total number of attacks reported was 9,200, and during the last three months of the year 566, making the total for the year 9,766, against 15,144 in 1877. As this disease is now supposed to be in such very close quarters it would be worth while to make a rush and stamp it out entirely, were it not for the fact that it is still being imported. If it were stamped out completely to-day there would be the possibility of fresh contagion being conveyed by indirect means from some port of landing to adjacent healthy stock to-morrow; for no less than 752 animals actually affected with Foot-and-Mouth Disease were landed on our shores during the year, 667 of which number came from the Netherlands, where no measures are taken for its suppression and where it is not even included in the official list of contagious or infectious diseases. However, the Metropolitan Market was free from Foot-and-Mouth Disease during the whole of the year 1878, with the exception of two cases in January; and at the Christmas market, for the first time during a period of ten years, no case of the disease was found among the animals exposed for sale.

Our importations from Ireland show an increase of cattle and sheep, and a decrease of pigs compared with last year, as will be seen from the following table:—

FAT STOCK.			
1877.		1878.	
Cattle .....	246,698	.....	245,944
Sheep .....	431,129	.....	446,628
Lambs .....	199,645	.....	196,371
Pigs .....	508,912	.....	401,167

1,386,384	1,290,110
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STORE STOCK.			
Cattle .....	356,249	.....	416,759
"Other Cattle."	7,706	.....	4,954
Calves .....	38,788	.....	61,564
Pigs .....	76,515	.....	69,380
479,258	552,657		

The total number of animals thus shown as imported from Ireland in 1877 was 1,865,642, and in 1878 the number was 1,842,767.

Our importation of stock from foreign sources was on a larger scale than in the year 1877. From the columns of the *Mark Lane Express*, for May 27th, 1878, we reproduce a table of foreign livestock importations in 1877, to show, by comparison with a corresponding table for 1878, the variations which have occurred in the character of the export trade of the several countries referred to:—

# IMPORTATION OF FOREIGN LIVE STOCK DURING THE YEAR 1877.

CATTLE.		SHEEP.		PIGS.	
Denmark	50140	Germany	426905	Netherlands	11413
Netherlands	44950	Netherlands	263264	France	4922
Schleswig-Holstein	34112	Belgium	61481	Denmark	1759
Spain	27255	Schleswig-Holstein	50661	Canada	584
Portugal	14582	Holstein	42646	Sweden	480
U. States	11538	Denmark	13120	U. States	226
Canada	7649	U. States	10275	Spain	73
Sweden	4756	Canada	1545	Germany	41
France	2804	Sweden	1517	Belgium	27
Belgium	372	France	448	Russia	19
Germany	155	Uruguay	158	Africa	9
Norway	110	Portugal	124	Norway	7
Malta	3	Russia	7	India	5
Argentine Confederation	2	Norway	4	Guiana	3
		Spain	4	Turkey	2
		Turkey	3	Portugal	1
		Malta	1	Italy	1
Total	198428	Total	872159	Total	19572

In this, and the following table for the past year, Schleswig-Holstein is given separately from the rest of Germany; and animals from countries printed in italics are nothing more than surplus ships' stores:—

# IMPORTATION OF FOREIGN LIVE STOCK DURING THE YEAR 1878.

CATTLE.		SHEEP.		PIGS.	
U. States	68540	Germany	393715	Netherlands	26035
Denmark	53253	Netherlands	253294	U. States	16321
Netherlands	34402	Denmark	65136	Denmark	5519
Schleswig-Holstein	31413	Schleswig-Holstein	52610	France	3700
Spain	22379	U. States	43940	Sweden	2318
Canada	17989	Canada	40132	Canada	1614
Portugal	13243	Belgium	38793	Belgium	59
Sweden	7846	Sweden	4598	Germany	20
France	422	France	203	Spain	2
Norway	91	Portugal	25	Bolivia	2
Canary Islands	16	Uruguay	10	Barbadoes	1
India	5	Spain	4	India	1
Malta	1	Peru	4	New Zealand	1
Uruguay	1	Chili	2		
		India	1		
		Tunis	1		
Total	249511	Total	892468	Total	55588

Thus it will be seen that the increase of foreign live stock importation in 1878 over that of 1877 is represented by 51,083 cattle, 20,309 sheep, and 36,016 pigs; and that in the case of both cattle and sheep the increase is entirely due to importations from the United States and Canada. With regard to pigs the increase is chiefly due to these fresh sources of supply, although the Netherlands, Denmark, and Sweden come in for a share of the credit. Two years ago the United States did not count for anything in respect of live stock imports: now she is first with cattle, second with pigs, and fifth with sheep. Next year she will probably be first with cattle and pigs, and third with sheep. And in a few years time she may be "looking around" for another world to feed. But the losses during transit were very heavy. The Report specifies them in the following manner:—From United

States ports 2,034 cattle, 3,266 sheep, and 2,398 pigs were thrown overboard; 271 cattle, 313 sheep, and 394 pigs were landed dead; and 139 cattle, 192 sheep, and 285 pigs were so much injured during transit as to render it necessary to slaughter them at the place of landing. From Canadian ports 551 cattle, 2,000 sheep and 418 pigs were thrown overboard; 43 cattle, 172 sheep, and 17 pigs were landed dead; and 24 cattle, 68 sheep, and 10 pigs had to be slaughtered at the place of landing. Together, 10,667 animals were thrown overboard, 1,210 were landed dead, and 718 were killed at the place of landing on account of their injuries.

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**FLIGHT OF THE HARE.**—Our common hare is singularly well adapted forgetting over the ground rapidly by the great length and powerful development of its hind legs. These organs are nearly twice as long as the fore limbs, and, as most of us are well aware, the bones composing them are set in motion by an enormous mass of solid muscle. Owing to their great preponderance the hare, when moving slowly in search of food, goes with a sort of lolling gait; but the moment there is occasion for him to move with rapidity, the disproportionate hind limbs stand him in good stead, as he shoots along over the ground by a series of long leaps, and with great swiftness. At the same time, it is observed that the length of its hind legs causes the hare to run with much greater facility up-hill than down, and, in fact, it is said that in descending steep inclines the animal is obliged to run obliquely in order to escape over-balancing itself. When pursued, the hare has the art of making sudden turns in its course, known as "doubles" or "wrenches," by which the dogs in chase of it are thrown out, for although most greyhounds are swifter of foot than a hare, they are incapable of changing their course so sharply, and thus, while they are carried some distance on by their own impetus, their intended victim is making off in a different direction. They adopt other cunning artifices in order to escape from their pursuers, and some of these indicate a considerable amount of intelligence. Under such circumstances, and also in search of a more plentiful supply of food, the hare will take to the water readily, and swim across rivers. Mr. Yarrell observed a hare even swimming across an arm of the sea about a mile broad.—*Cassell's Natural History.*

## THE FARMERS AND THEIR FRIENDS.

If ever there was a class which needed to be saved from its friends, it certainly is the farming class of the present day. Mr. Samuelson, in the House of Commons, recently proposed an inquiry into the operation of the Agricultural Holdings Act. Immediately he is met by a host of the supporters of the Farmers' Friend Government, who declare that no such enquiry is needed, and that the Act is working satisfactorily, though it is patent to the whole country that nine-tenths of the landed proprietors have contracted themselves out of its operation. This was a little too palpably false for Mr. Read, with all his Tory predilections, and he voted in favour of Mr. Samuelson's motion. But his new colleague, who had so recently given his solemn pledge to his constituency, that in all subjects relating to agriculture he should be guided by Mr. Read, utterly disregarding his pledge, was found supporting the Government in their opposition to Mr. Samuelson's very modest request in the interests of the farmers. Mr. Bennet-hassett has given notice of his intention to move "That it is desirable that the power of distraint for the rent of agricultural holdings in England, Wales, and Ireland should be abolished," thus attacking one of the greatest causes of hindrance to the progress of agriculture by subjecting the tenant-farmer to fictitious competition in hiring his land and destroying his credit. Upon this, the tenant-farmer's representative and special friend, Mr. Read, intervenes with an amendment, which seems designed to render the motion as palatable to the landlord, and, therefore, as useless to the tenant as the Agricultural Holdings Act itself. We are at a loss to understand how the hon. gentleman reconciles this obstruction to the removal of restraint, with his recent vote on the question of Hypothec, or his condemnation of the principle of that law in his speech at the Farmers' Club, in the discussion of Mr. Wrighton's paper on that subject. But Conservative reasoning was ever too subtle for our dull comprehension. Mr. Sidney Smith, another would-be farmers' friend, in a recent letter to the *Mark Lane Express*, asserts that the law of distraint has the effect of improving the farmer's credit! Well, it is certainly a novel mode of raising a man's credit to place a permanent lien upon his effects, and it is a notorious fact that the merchant, the tradesman, and the dealer, can all obtain pecuniary accommodation more easily than the farmer; the money lender being well aware of the prior claim of the landlord on his stock-in-trade. Mr. Smith's crowning argument against the abolition of distraint is that, in such case, the land would only be cultivated by large capitalists! Well, then, here is the remedy for the complaint so generally laid against tenant-farmers, especially by landlords, that they do not bring capital enough to their business; and we agree very much with the admission of Mr. Smith, that nothing the Legislature can do would be more likely to attract additional capital to the cultivation of the land. But the unkindest cut of all is that given the farmers by the chief of the Government of "Farmers' Friends," who coolly tells men who are at their wits' end to find a sovereign to pay their debts, that the cause of their sufferings is an influx of gold!—which, however, he acknowledges, occurred some years since, and of which, we venture to think, the farmer was quite unconscious, though he is painfully aware of the depletion of cash which the Premier assures him was certain to follow in the natural course of events. This farmers' oracle, however, carefully avoids any allusion to the *spirited foreign policy* of which he and his colleagues have been the authors, and which has undoubtedly had quite as much influence in bringing about the general depression in agriculture and all other peaceful pursuits as any of the causes to which he chooses to ascribe it. The tenant-farmer seems to us to be in the unfortunate position of having no friends, which fully accounts for the many hard hits he has to bear. The Liberal party are suspicious and jealous of him, on account of his persistent adherence to the party who always strenuously oppose their programme of to-day as of old—"peace, retrenchment, and reform;" and those who profess to be his friends simply use him as a stepping-stone to power, never hesitating to kick down the ladder by which they climb, being well aware from experience that they are in the position of Garrick of yore—

"Who threw off his friends as a huntsman his pack,  
For he knew when he liked he could whistle them back."  
—*Northwich Mercury.*

## REVIEW OF THE CORN TRADE,

FROM *THE MARK LANE EXPRESS* FOR THE WEEK ENDING APRIL 28.

Little or no improvement has taken place in the weather during the past week, and the season advances unattended by any of the genial influences with which we are accustomed to associate the advent of May. Dull dreary days, whose chief characteristics have been cold winds and copious rains, have succeeded each other with a steady persistency which augurs unfavourably for any immediate prospects of a change; while night frosts have starved the cereals, withered the blossoms on the fruit trees, and checked development of all vegetation. Under such unkindly climatic conditions it is needless to state that what little progress agricultural affairs have made have been of a most desultory description. Nor has the harsh weather been only of a partial character, for from all parts of the United Kingdom, and many of the Continent, reports have chronicled a week of storms and a wintry temperature. Unreliable as forecasts frequently are, it must be admitted that the gloomy prognostications which followed the unsettled equinoctial period have, up to the present, been only too well fulfilled. Although somewhat variable, the majority of the reports as to the condition of the growing Wheat plant concur in the stating it to be thin and backward. In the lowlands of Scotland farm-work is sufficiently advanced to prevent much uneasiness, but the heavy falls of rain and snow have quite put a stop to spring sowing in the higher districts, indeed much of the land is yet unploughed. Stock owners have also suffered severely by the severity of the weather, which has not only starved the grass land and necessitated hand feeding, but has materially reduced the condition of the ewe flocks at a time when they suffer most from exposures to cold and wet. The supplies of English Wheat have been fairly liberal at the country markets, and, with increased steadiness in the trade, the average price shows a slight improvement. At Mark Lane, however, the offering have been light, and buyers have only responded to the firmness of holders by taking the choicest lots at the full price of the last week. The imports of Foreign Wheat into London have been to a fair extent, last Monday's return showing an arrival of about 33,000 qrs., and on Friday a further 18,000 qrs. were reported; while at Liverpool supplies have been unusually heavy. In both ports more steadiness has been observable in the trade, although the weight of present and prospective supplies still restricts the operations of the buyers. At the same time an improved demand has certainly followed the inactivity caused by the Easter holidays, but the absence of speculation has tended to contract business to the supply of present requirement, and stocks have diminished slowly. Very little change can be noted in price, as supply and demand have been pretty evenly balanced, and there certainly does

not appear to be much margin for alteration either way in the immediate future, as the depressing tendency of the large visible supply in America is likely to be counteracted by the unsatisfactory agricultural outlook and the large needs of France. Some sorts of American Wheat are rather cheaper than they were a fortnight ago, but the decline has not been quoted, as it has only affected inferior produce. Fine red winter have certainly not been obtainable at any less money, although buyers, have tried hard to get them. Nearly all the Spring Wheat recently arrived from Atlantic ports has been of very poor quality, full of shrivelled grains and wasting much in grinding, and this accounts for its being purchasable at such low prices at 35s. to 36s. for No. 3 Chicago and 39s. for No. 2 Milwaukee, per 480lb. cost, freight, and insurance. Maize, if freely offered, goes begging to a great extent, 21s. 9d. per 480lb. ex store being the utmost obtainable for old mixed American in perfect condition, while new can be had at about 6d. less. Barley has sold slowly without alteration in value, but oats have been in better request and prices have favoured sellers. The sales of English wheat noted last week were 53,483 qrs., at 40s. 11d., against 33,355 qrs., at 51s. 8d., in the previous year. The London averages for the week ending April 25th were 40s. 3d. on 2,473 qrs. The imports into the United Kingdom for the week ending April 19th were 1,110,172 cwt. of wheat, and 220,139 cwt. of flour. As the first market of importance after the Easter holidays was held at Mark Lane on Monday last there was a full attendance of millers and country buyers, and the course of the day's business was marked by a fairly steady tone and rather more activity in nearly all descriptions of cereal produce. In few instances, however, could any improvement be noted in prices, as the liberal imports of wheat, flour, and maize prevented any upward movement which the improved inquiry might otherwise have brought about. The week's arrivals of English wheat amounted to 3,016 qrs., and there was a very moderate supply fresh up on factors' stands. The extreme quotation of the previous week were demanded, but were only obtainable for the best lots, and, in spite of the firmness of holders, sales progressed but slowly. The imports of foreign were liberal, amounting in all to 53,257 qrs., of which quantity upwards of 31,000 qrs. were from Southern Russian ports. America furnished 12,668 qrs., and Germany 7,343, the remainder of the supply consisting of East Indian, New Zealand, and Australian varieties. The trade ruled quiet, but previous rates were firmly maintained for all except secondary qualities of American, which showed a decline of 6d. per qr. on the fortnight. The day's sales were not large, but increased firmness was observable at the close of the market. The exports

were 1,544 qrs. against 3,155 qrs. in the preceding week. The supply of Barley consisted of 1,308 qrs. of home-grown and 5,163 qrs. of foreign. Owing to the continuance of cold weather fine malting sorts were in fair request and fully as dear, while grinding descriptions met a slow sale at former currencies. There were 13,123 qrs. of maize reported, all of which was from New York. Some signs of increasing steadiness were observable, but the demand was slow and prices underwent no quotable variation. The imports of oats were 35,919 qrs., and, as dealers showed more disposition to operate, sellers were enabled to establish an advance of 3d. to 6d. per qr. On Wednesday the return showed 120 qrs. of English wheat and 14,820 qrs. of foreign. There was a fair attendance for a mid-week market, and in all branches of the trade the steady tone observable on Monday was well maintained. American wheat met an improved demand, but was without change in value, and barley and maize were unaltered, but oats tended in sellers' favour. On Friday the supply had increased to 680 qrs. of English wheat and 18,040 qrs. of foreign. The trade ruled steady at previous prices, but the demand was light and the market closed quiet. Maize was slow and barley unchanged, while oats were fully as dear. The imports of flour into the United Kingdom for the week ending April 18th, were 220,138 cwts. against 184,480 cwts. in the previous week. The receipts into London were 14,056 sacks of English, and 10,253 sacks and 4,698 barrels of foreign. Country-made has been firmly held, and prices show no quotable variation, but American barrels have been the turn lower, both on spot and for shipment. The week's arrivals of beans were 39,730 cwt., and of Peas 50,210 cwt., showing an increase of 5,247 cwt. on the former, and 14,061 cwt. on the latter. An improved demand has been experienced for both articles, and the tendency of prices has been against buyers. The deliveries of malt were 15,936 qrs. and the exports 1,243 qrs. A somewhat steadier tone has been observable in the trade for this article, but as yet no improvement can be recorded in prices. Business in agricultural seeds has been a good deal restricted of late by reason of the unfavourable weather and lateness of the season. The low point to which values have fallen has rendered the past season a very unremunerative one to growers, whose operations, both in corn and seeds have resulted in disappointment. During the past week the trade has ruled quiet for all varieties, and prices remain unaltered. Rape and linseed have been in better request, but there has been very little inquiry for Canary. A quiet and steady tone has characterised provincial trade throughout the past week, and the country markets have been fairly supplied. An occasional decline of 1s. per qr. was quoted on wheat, but the reduction was only necessary to quit secondary parcels, as all good lots have fully maintained late rates. No change can be noted in spring corn. At Liverpool on Tuesday the market was well attended, and a better tone was noticeable in the wheat trade, especially for the finer sorts, which were in request at fully former rates. Secondary qualities, however, were about 1d. per cental

cheaper. Flour was inactive and rather weaker, and maize was also offered on rather easier terms, but there was no material change in other articles. The week's imports include 107,000 qrs. of wheat and 27,000 qrs. of maize. At Newcastle there has been very little business passing in wheat, for which prices receded 1s. per qr. Flour has also been rather weaker, but maize maintains a firm position. At Hull English wheat has met a steady sale at late rates, but foreign has ruled dull. At Leeds there has been scarcely anything passing in grain, and, although in the absence of demand prices are nominally unaltered, sellers would make some concessions to bring about business. At Edinburgh wheat has been in small supply, but a reduction of 6d. to 1s. per qr. has been necessary to effect sales. Barley has ruled slow, but oats have realised rather higher rates for the finer qualities. At Leith fair progress has been made with sowing, as the weather has been rather drier, but the temperature has been very low and vegetation is in a backward state. The week's imports have been moderate of all articles; at the market on Wednesday Scotch wheat receded 6d. per qr.; foreign with little offering on the spot, maintained former values, but business was by no means brisk. Oats were occasionally 3d. per qr. dearer, but other feeding stuffs remained unaltered. At Glasgow the arrivals from abroad have been heavy of wheat and flour, but light of other articles. Wednesday's market was fairly attended, but the trade was slow and prices exhibited a declining tendency. Wheat was 6d. to 1s. per qr. cheaper to sell, and flour gave way 1s. per sack and barrel. Oats were steady, while maize declined 6d. per qr. At Dublin the weather has been wet and unseasonable, and no change can be recorded in the position of wheat, which continues to meet a slow sale at nominally late rates. Maize has become rather scarce and somewhat better prices have been obtainable. At Cork a limited amount of business has been done in wheat, but increased steadiness has prevailed. Maize advanced 1s. 6d. per qr. owing to temporary scarcity, but subsequent arrivals have reduced rates to their former level.

The following are the reports from Mark Lane during the past month :

#### Monday April 7.

The arrivals during the past week have been : English Wheat, 4,274 qrs.; foreign, 17,397 qrs. Exports, 2,867 qrs. There was a fair supply of English Wheat at market this morning, and the trade ruled slow at about late rates; of foreign the arrivals were small, and a moderate retail demand was experienced at last Monday's currencies, but there was very little animation in the trade, and to have made sales in any quantity lower rates would have had to be accepted.

Country Flour, 15,216 sacks; foreign, 8,089 sacks, and 18,085 barrels. Business ruled quiet for both sacks and barrels, but prices underwent no further decline.

English Barley, 862 qrs.; Scotch, 1,208 qrs.; foreign, 2,530 qrs. Malting descriptions ruled slow at about late rates, and grinding sorts were neglected, but without quotable change in value.

Malt, English, 17,107 qrs.; Scotch, 1,685 qrs. Exports, 928 qrs. A dull trade at about last week's currencies.









*Turnistock*  
*A prize hunter, the property of Mr. Henry & Company, City of London, who have a number of*

*London, 1840, published by Messrs. W. & A. Groom, 10, Strand, W.C.*

# THE FARMER'S MAGAZINE.

JUNE, 1879.

## PLATE.

### TAVISTOCK.

A PRIZE HUNTER, THE PROPERTY OF T. HARVEY D. BAYLY, ESQ., EDWINSTOWE HOUSE, NEWARK.

Tavistock is a bay gelding, six years old, by Gemmadi Vergy, and was bred by Mr. Pollard, Blagdon, South Devon, who sold him to Mr. Battams, of whom Mr. Harvey Bayly bought him. He is a horse of great size and power, with good action, and although he does not take after his sire in form or colour, still he shows a deal of breed in his limbs. Tavistock has a good sensible head, capital hunting neck and shoulders, is deep through the heart, has a short back, with good loins, powerful drooping quarters, and knees and hocks near the ground. Last year at Alexandra Park he was awarded the first prize in a class of seventeen, five

years and upwards, up to not less than 14 stone, and the Alexandra Park medal and £50 as the best hunter in the show. At Islington he did the like, being first in a class of twenty-seven up to not less than 15 stone, and then beat Baldersby, Golden Drop, and the Dandy for the Agricultural Hall Medal; winding up the season at Northallerton by winning the Yorkshire Agricultural Society's prize of £50, in a class of nineteen, for the best gelding or mare, five, six, or seven years old up to 15 stone with hounds, and which had been regularly hunted during the season 1877-78.

## AGRICULTURAL SOCIETIES.

### ROYAL OF ENGLAND.

Monday Council, Wednesday May 7th, 1879. Present: H.R.H. The Prince of Wales, K.G. (President), in the chair; Earl Cathcart, the Earl of Powis, the Earl of Ravensworth, Earl Spencer, K.G., General Viscount Bridport, Lord Vernon, Sir T. Dyke-Ackland, Bart., M.P., Sir A. K. Macdonald, Bart., Sir W. Earle Welby-Gregory, Bart., M.P., Sir Brandreth Gibbs, Mr. Amos, Mr. Arkwright, Mr. Aveling, Mr. Bowly, Mr. Cantrell, Mr. Davies, Mr. Dent, Mr. Druce, Mr. Foster, Mr. Charles Howard, Mr. James Howard, Mr. Bowen Jones, Col. Kingscote, C.B., M.P., Mr. Leeds, Mr. McIntosh, Mr. Martin, Mr. Masfen, Mr. Odams, Mr. Randell, Mr. Rawlence, Mr. Russell, Mr. Sanday, Mr. Sheraton, Mr. Shuttleworth, Mr. Stratton, Mr. Torr, M.P., Lieut.-Col. Turberville, Mr. George Turner, Mr. Jabez Turner, Mr. Wakefield, Mr. Wells, Mr. Whitehead, Mr. Jacob Wilson, Mr. Wise, Professor Simonds, and Dr. Voelcker.

Sir Henry J. Tufton, Bart., of Hotfield Place, Ashford, and Mr. J. B. Lawes, of Rothamstead, St. Albans, were elected Governors of the Society; and the following new members were elected:—

Alexander, Alec James, of Gushmore Court, Selling, Faversham.

Allen, George, of Knightley Hall, Eccleshall, Staffs.

Apperley, Wm. H., of Wethington, Hereford.

Arkwright, Loftus W., of Paradox Hall, Harlow.

Armstrong, Charles, of Corden Lodge, Carlisle.

Armstrong, John, of Unthank, Skelton, Pennrth.

Bainbridge, Thomas, of North Coxlodge, Gosforth, Newcastle-on-Tyne.

Baker, John B., of Nile Terrace, Rochester.

Baker, the Rev. Sir Talbot, H. B., Bart., of Ranston, Blandford.

Bar'ow, Thomas Edward, of Sandown Road, Seaforth, Liverpool.

Barnes, John, of Baurgh Syke, Wigton.

Barnes, John, of Kelsick, Wigton.

Batho, George S., of the Lighteach, Whitechurch, Salop.

Baxendale, Lloyd, of Greenham Lodge, Newbury.

Bayley, William, of Britwell Farm, Barham, Maidenhead.

Bayvet, M. Gustave, of 82, Boulevard, Haussmann, Paris.

Bell, John, of Monk Castle, Carlisle.

Bell, John Jackson, of 6, Lonadale Street, Carlisle.

Bell, Joseph, of Monk Castle, Carlisle.

Binning, Samuel Jackson, of 2, Meadow Terrace, Carlisle.

Body, John, jun., of Wittersham, Ashford.

Bond, Thomas E., of Pulham, St. Mary Hall, Harleston.

Booth, William C., of Oran, Catterick.

Boscawen, the Hon. and Rev. J. Townshend, of Lamoware, Probua.

Boulton, Henry, of Checkley, Nantwich.

Bowers, James, jun., of The Warren, Chester.

Brook, Edward, of Meltham Hall, Huddersfield.

Brown, Frederick Sayers, of Bracondale, Norwich.

Bullivant, W. M., of Woodlands, Chigwell Row, Essex.

Burn, John Henry, of Cerres Iron Works, Kingston-on-Thames.

Bunning, William, of Pentwin Farm, Pontypool.

Burkitt, H. G., of Fighting Cocks, Darlington.

Burnell, John T., of Oaklands, Alleyn Park, West Dalwich, Surrey.

Burrows, George William, of Henry Road, Barnet.

Callwood, James, of Chelford, Chester.

Campion, W. Henry, of Danny, Hurstpierpoint.

Carpenter, Joseph, of Burecombe, Salisbury.

Casewell, William, of Heath Gates, Fries, Salop.

Cavendish, Henry Cavendish, of Chyknell, Bridgnorth.

Cely-Trevilian, J. R., of Debdon Hall, Saffron Walden.

Chaloner, Richard, of King's Fort, Moynalty, Co. Meath.

Chandler, William, of Aldborne, Hungerford.

Chapman, John, of East Sutton, Staplehurst.

- Cheeseman, Alfred, of Norwood Farm, Eastchurch, Sheerness.  
 Chesworth, William, of Burland, Nantwich.  
 Chinnock, Frederick George, of 11, Waterloo Place, Pall Mall S.W.  
 Chowen, Henry L., of Dalton Holme, Hull.  
 Cladish, Edward, of Blean House, St. Thomas's Hill, Canterbury.  
 Cook, Edwin, of Appledore, Ashford, Kent.  
 Cole, William, of Clifton Lodge, Cirencester.  
 Coleman, Thomas, of Goss Hall, Ash, Sandwich.  
 Cooper, William, of Swanley, Chislehurst, Kent.  
 Cornwall, Frank, of 15, Clement's Inn, E.C.  
 Court, John, of Gould's Court, Maidstone.  
 Cowen, Robert Watson, of Mid Elless, Dalston, Carlisle.  
 Crosby, John Wright, of West Derby, Liverpool.  
 Crosskill, Thomas, of St. Cuthbert's College, Durham.  
 Crowhurst, William Henry, of 68, Stour Street, Canterbury.  
 Cuming, J. A., of King's Arms Hotel, Grays, Essex.  
 Derby, Thomas C., of Fleshey, Chelmsford.  
 Davies, William, of Hinstock, Market Drayton.  
 Day, John, jun., of Barton Manor, Ash, Sandwich.  
 Dodds, William, of Ratcheugh, Alawick.  
 Drewitt, George, of Piccadilly Farm, Guildford.  
 Drewitt, William, of Dunton, Petworth.  
 Dunn, Charles Alfred, Old Dover Road, Gravesend.  
 Eley, George, of Queensdown Warren, Hartlip, Sittingbourne.  
 Eley, Thomas, of Loyterton, Lynsted, Sittingbourne.  
 Eley, William Henry, of Strood, Rochester.  
 Eliza, Edward, of Gorawen, Conway.  
 England, William, of Alexandra Park, Harrogate.  
 Evans, Amwell L., of Postlip Hall, Winchcomb.  
 Ferme, George, of Leigham Lodge, Rospell Park, Streatham Hill, Surrey.  
 Finnemore, Frederick, of Cranbrook, Kent.  
 Fletcher, Thomas, of 46, Fishergate, Preston.  
 Foster, James Thomastin, of Barnston Lodge, Danmow.  
 Foster, W. H., of Spratton Grange, Northampton.  
 Fox, William, of Whiston, Shifnal, Salop.  
 Fuller, George A., of The Rookery, Durking.  
 Gape, Walter, The Elms, Ongar.  
 Gobbitt, William, of Bawdsey, Woodbridge.  
 Gold, Henry, of The Kennels, Woburne Park, Beaconsfield.  
 Goodwin, Charles, of Norwich.  
 Gower, B. S., of Market Drayton.  
 Graham, Thomas, of Beanlands Park, Irthington, Carlisle.  
 Gray, John, of Abbotston, Alresford.  
 Grinlier, Henry, of 35, York Terrace, Regent's Park, N.W.  
 Grissell, Thomas D., of Norbury Park, Dorking.  
 Gubbins, Colonel James, of Ashwellthorpe Hall, Wymondham.  
 Gwynne, Alban, of Monachty, Aberavon, Cardigan.  
 Hall, John, of Bellingford, East Dereham.  
 Harford, William Henry, of Barley Wood, Wington, Somerset.  
 Hart, Thomas Hope, of Park Farm, Kingenorth, Ashford.  
 Hartley, P. P., of Newell House, Lymm, Cheshire.  
 Harvey, John Sankey, of Victoria House, Wincheap, Canterbury.  
 Harvey, Josiah P., of Kidderminster.  
 Hedgecock, William, of Caxton Road, Strood, Rochester.  
 Herrick, Mrs., of Beau Manor Park, Loughborough, Leicestershire.  
 Hilder, A. F., of Ridley Court, Sevenoaks.  
 Hooper, William, of Little Fortfield, Templeogue, Co. Dublin.  
 Horrell, William, of Thorney, Peterborough.  
 Howatson, Charles, of Dornel, Mauchline, Ayr, N.B.  
 Huggins, Henry Thomas, of 7, Belize Square, South Hampstead, Middlesex.  
 Hussey, John, of 46, East Street, Faversham.  
 Ingram, George, of Blandford.  
 Innes, John, of Manor Farm, Merton, Surrey.  
 Jackson, James, of Leggatts, Tillingham, Maldon.  
 Jay, Tom Simpson, of The Wilderness, Wimbledon, Surrey.  
 Jones, Alfred Brown, of Mere House, Ramsey, Hunts.  
 Jones, Archibald S., of Grove House, Dymchurch, Folkestone.  
 Kirby, John, of Burton Fields, Stamford Bridge, Yorks.  
 Laidlaw, Alexander William, of Mason's Hill, Bromley, Kent.  
 Lamb, Thomas, of North Ockenden Hall, Romford.  
 Laton, Thomas Richard, of Aylesbury.  
 Law, Frank, of Station Road, Sandbach.  
 Lawson, Isaac, of Holme House, Warwick Bridge, Cumberland.  
 Lea, Ernest A., of Claremont House, Newton Hill, Leeds.  
 Ledbrook, John Stanley, of The Woodloes, Warwick.  
 Ledbrook, Thomas, of The Woodloes, Warwick.  
 Lewis, Leyson, of East Farleigh, Maidstone.  
 Ley, Francis, of Vulcan Ironworks, Derby.  
 Jewell, Robert William, Court Colman, Bridgend.  
 Longbottom, J., of Worcester.  
 Luddington, Joseph William, of Littleport, Cambs.  
 Lyon, Arthur W., of Abbots Clowhalme, Rochester, Kent.  
 Mann, Edward, of Thelveton Hill, Scole, Norfolk.  
 Marriott, David, of Berney Hill, Ponteland, Northumberland.  
 Marriott, H. R., of Whalley Range, Manchester.  
 Maskeleyne, Henry, of Bucklebury House, Reading.  
 Hason, James, of 26, Spencer Street, Carlisle.  
 Matheron, Henry, of Cross Cheapney, Coventry.  
 Mated, John, of Easting, Faversham.  
 May, Thomas, of Chalkpit Farm, St. Paul's Cray, Chislehurst.  
 Mercer, Robert, of Rodmersham, Sittingbourne.  
 Meredith, Thomas, of Rowley, Bridgnorth, Salop.  
 Merlabin, P., of Kilmayish, Mullingar, Co. West Meath.  
 Miles, William Henry, of Ham Green, Bristol.  
 Miller, James P., of Mount Pleasant, Fensanton, St. Ives.  
 Morrey, James, of Sutton, Market Drayton.  
 Morton, George, of Kinderton Hall, Middlewich.  
 Mounsey, W. H., of Lowther, Penrith.  
 Nash, T. Gifford, of Great Chesterford, Essex.  
 Naylor, Christopher John, of Brynllwarch, Newtown, Mont.  
 Noakes, William, of Barra Hill, Breachley, Staplehurst.  
 North, J. R., of 65, Oxford Road, Ealing.  
 Odum, John, of The Firs, Newsham, Peterborough.  
 Oule, George F., jun., of Top House, Rawcliffe, Selby.  
 Paddock, James, of Chetwynd Aston, Newport, Salop.  
 Paget, Howard F., of Elford, Tamworth.  
 Palmer, T. Leonard, of Wilby, Littleborough.  
 Parham, Harry Matthews, of Norrington, Salisbury.  
 Parker, Frederick Townley, of Rosewarne, Camborne.  
 Parkin, John Samuel, of 11, New Square, Lincoln's Inn.  
 Parsons, Arthur, of Cornwell, Chipping Norton.  
 Parton, Joseph K., of Sumner House, Maidstone.  
 Pearson, John, of Mainforth, Ferry Hill, Durham.  
 Peat, Robert, of Lees House, Silloth, Cumberland.  
 Peirson, Henry Thomas, of Brancepeth, Durham.  
 Pell, Henry, of 112, East Street, Sittingbourne.  
 Pepper, William Henry, of Challock, Ashford, Kent.  
 Phelps, Daniel, of Tibberton, Gloucester.  
 Phillips, Charles J., of The Cedars, Mortlake.  
 Piddenden, John, of Aldington, Hythe, Kent.  
 Powell, Thomas, East Lenham, Maidstone.  
 Pratt, James W., of Ashwellthorpe, Wymondham.  
 Pryse, Edward L., of Prithy Hill, Aberystwith.  
 Purdy, James, of 28, Devonshire Place, Portland Place, W.  
 Rammell, John W., of St. Nicholas at Wade, Margate.  
 Reay, Lord, of 6, Great Stanhope Street, Mayfair, W.  
 Richardson, Ralph, of Field House, West Rainton, Fens Houses.  
 Richardson, William, of Brow Top, Warwick, Carlisle.  
 Riddell, James, of Handlip Court Farm, Worcester.  
 Ridley, Charles Ernest, of the Elms, Chelmsford.  
 Rigg, Charles A., of Whitehaven.  
 Robinson, John Peter, of Escher, Surrey.  
 Robinson, Thomas, of Cargo, Carlisle.  
 Saul, Silas George, of Millhouse, Carlisle.  
 Saunders, J. G., of Wollaston Farm, Stourbridge.  
 Scott, Thomas, of Ditton Court, Larkfield, Kent.  
 Shoobred, Walter, 127, Piccadilly, W.  
 Simmons, Thomas, of Hill Farm, Markyate Street, Herts.  
 Slater, George, of Canterbury.  
 Smith, Robert, of Bifrons Cottage, Canterbury.  
 Sneed, Captain James A. F., of Pwll Court, Crickhowell.  
 Solomon, Arthur, of Cobham, Gravesend.  
 Spark, Peter, of Withersfield Hall, Newmarket.  
 Stedman, James, jun., of Tweedale, Gillingham, Kent.  
 Stevens, Thomas, of Jenkin's Court, Cobham, Gravesend.  
 Stratton, George, of Wheeler Lodge, Husbands, Baworth, Ragby.  
 Start, Hon. Humphrey Napier, Crichel, Wimborne.  
 Sutton, John, of Womanswood, Canterbury.  
 Tait, James, of Garmondaway House, Coxbie, Durham.  
 Tanner, Professor H., of Abergelle.  
 Tassell, Bradbury William, of Hode, Patricbourne, Canterbury.

Taunton, Silas, J., of Odstock, Salisbury.  
 Taylor, George, of Stanton Prior, Bristol.  
 Taylor, J. Herbert, of Hutton Hall, Penrith.  
 Thoday, Jule Few, of The Limbs, Wellingham, St. Ives.  
 Thompson, George Bell, of Faugh Beeches, Carlisle.  
 Thompson, Henry, of Chilwell, Nottingham.  
 Thompson, Charles J., of Solebridge, Rickmansworth, Herts.  
 Thoys, Rev. Francis W., of Ashe Rectory, Micheldever, Hants.  
 Tones, William, of East Claydon, Winslow, Bucks.  
 Tordiff, George, of Wolsley Stangs, Silloth, Cumberland.  
 Tuxford, Weston, of Boston, Lincolnshire.  
 Tweddell, E., of Denston Bank, Gateshead-on-Tyne.  
 Waddell, John, of 10, St. Andrew's Square, Edinburgh.  
 Wakefield, George, jun., of Beasted, Maidstone.  
 Walker, Charles, of The Team Yard, Brompton, Chatham.  
 Walker, John James, of 11, St. George's Terrace, Herne Bay.  
 Walker, Matthew W., Lenton Road, The Park, Nottingham.  
 Walker-Jones, F. A., Mollington Farm, Chester.  
 Ward, Harry, of Cheswardine, Market Drayton.  
 Warner, William, of Newley, Tetbury, Gloucestershire.  
 Watson, Lawrence, of 4, Park Road, Middlesboro'.  
 Watt, James, of Knowfield, Carlisle.  
 Watts, Thomas C., of Teynham House, Upper Clapton, N.  
 White, Samuel, of the Hoo Farm, Kidderminster.  
 Williams, Edward W., of Harrington, Dorchester.  
 Willis, Frederick, of 16, Ladbrooke Square, Bayswater, W.  
 Willis, Henry Richard, of Kidderminster.  
 Winsor, Albert, of Morington, Rolvenden, Kent.  
 Wright, John D., of Haraby, Carlisle.  
 Wright, John E., of Preston Manor, Lavenham, Suffolk.  
 Wynne, T. Richard, of Tyisa, Corwen.  
 Young, William David, 32, St. George's Street, Canterbury

## FINANCE.

Colonel KINGSCOTE (Chairman) presented the report, from which it appeared that the Secretary's receipts during the past month had been examined, and found correct. The balance in the hands of the bankers on April 30th was £7,222 17s. 8d.

This report was adopted.

## CHEMICAL.

Mr. WELLS (Chairman) reported that the Committee had had under their consideration a letter from Mr. Lawes respecting the Woburn experiments, which appeared in the *Agricultural Gazette* of April 21st. They regretted that Mr. Lawes, who is a vice-president of the Society did not communicate with the Chemical Committee, of which he is a member, before publishing his letter. While welcoming fair criticism from any quarter, more especially from Mr. Lawes, the Committee thought that, considering the short period during which the experiments have been under the present management, the time has not yet arrived for a full discussion of the method of carrying them out, or of the results obtained. Dr. Voelcker had reported that from March 15th to May 6th, 363 samples had been received for analysis; and the Committee recommended that he be authorised to engage an additional assistant. The Committee received the report of the Woburn Sub-Committee.

This report was adopted.

## SEEDS AND PLANT DISEASES.

Mr. WHITEHEAD reported that he had been elected Chairman for the year. The following correspondence had been received from the Foreign Office with regard to an insect which is most destructive to the corn crop in the neighbourhood of Sarama, a village situated in the centre of the Paphos district in Cyprus.

## Foreign Office.

SIR,—I am directed by the Marquis of Salisbury to transmit to you herewith a copy of a despatch from Her Majesty's High Commissioner in Cyprus, enclosing specimens of an insect which destroys the crops in a certain district in that island, and I am to state to you that his Lordship would be much obliged to your Society for any suggestions which they

may have to offer as to the destruction of the insect in question. I am, sir, your most obedient humble servant,

PHILIP CURRIE.

The Secretary to the Royal Agricultural Society.

[ENCLOSURE.]

Cyprus, Government House, Nicosia.

March 25th, 1879.

MY LORD,—In the neighbourhood of Sarama, a village situated in the centre of the Paphos district, there is a small portion of country, about three square miles in extent, which is annually infested with an insect which destroys all corn it attacks. I have not heard of its presence elsewhere in the island; and as it has infested the locality referred to for years past, it would seem as if there were something peculiar to its soil which attracts and tends to propagate the insect.

In the accompanying closed envelope I forward specimens of the insect, with a view to its being submitted to the inspection of those learned in such matters, who might be able to suggest some means for destroying it. As the soil would seem to breed the insect, perhaps the use of some peculiar manure might possibly destroy it. The peasants of the district concerned know the insect by the name of *survivil*.

The specimens of these insects have been submitted to Mr. Carruthers, and he obtained the opinion of an eminent naturalist, who declared that they were in the larval state, and that, therefore, it was most difficult to determine their species. Further investigations would be made, and the results immediately forwarded to the Foreign Office.

The Committee had received the following report from the Consulting Botanist:—

A large number of samples of seeds have been examined by me during the past few months.

My attention has been specially called to the seeds for permanent pasture. The result of careful experiments with numerous samples, and the dissection of a large series of seeds, have shown that great disregard is paid, at the time of collecting, as to whether the seeds are ripe. In all the cases in which the seeds obtain a considerable size, as in the ryegrasses or even in Timothy grass, the merchant, as well as the ultimate buyer, can easily detect the presence of any considerable quantity of imperfect or undeveloped seeds. But in the grasses with small seeds, or with seeds that are small relatively to the glumes or chaff which surround them, it is more difficult to determine whether samples are fully ripe. The foreign grower (for our grass seeds are, with few exceptions, imported), perhaps unwittingly, collects them when they are still unripe. The result is that a large percentage never germinate of such grasses as meadow fescue, the meadow grasses, sweet vernal grass, &c. In some mixtures of permanent grasses I have found that not a single seed of *Poa trivialis* and *Alopecurus pratensis* has germinated, and on examination I have found that this was mainly due to their being gathered before they were ripe. In many cases they had been gathered before the flower had appeared, and the unexpanded stamens were still enclosed in the blossom, in others the seed had just begun to form.

It is difficult to suggest an efficient remedy for this serious evil. The persistent refusal of seeds which are found to be almost worthless from too early harvesting would no doubt in time tell upon the grower through the merchant and importers, though this is necessarily a somewhat roundabout way to reach the source of the evil.

But failure in growth is not always due to unripened seed. I have recently examined a sample of black oats, of which a member had sown four bushels to the acre and expected a thick crop. The sample consisted of large and fully ripened grains, but only 32 per cent. germinated. In the remainder the embryo was dead, most probably because the seed was old, though careless harvesting of the best crops may speedily destroy the life of the seed.

Several cases of injury to cattle through the presence of noxious substances in their food, such as ergot, poisonous weeds, and yew twigs, have received my attention.

An interesting inquiry as to the means of dealing with insects which have proved very destructive to the crops in some regions in Australia, is being proceeded with on behalf of a member of the Society whose property in that colony has suffered severely from them.

Mr. WHITEHEAD added, with regard to the insects from Cyprus, that they were in the larval stage, and very much shrivelled, and were only received on the 3rd of May. The naturalist to whom they had been submitted found it exceedingly difficult at present to say even whether they belonged to the Lepidopterous or Coleopterous order. If a reliable determination could not be made from these larvae, it was intended to ask the Foreign Office to obtain perfect specimens of the insects for examination. The report was then adopted.

#### SHOWYARD CONTRACTS.

Mr. JACOB WILSON (Chairman) reported that eight tenders had been received for the water supply, that of Messrs. Eastons and Anderson being accepted. Plans for several erections in the Exhibition were submitted by the Surveyor, and approved by the committee.

This report was adopted.

#### JUDGES SELECTION.

Mr. GEORGE TURNER reported that the Committee had completed their list of foreign judges to be invited, together with those for British breeds not previously appointed. This report was adopted; and on the motion of Mr. RANDALL, seconded by Mr. GEORGE TURNER, it was resolved, "That Inspectors of Shearing be appointed, as in former years."

#### VETERINARY.

Colonel KINGSCOTE, C.B., M.P., (Chairman) reported the receipt of reports from the Royal Veterinary College on investigations made, and the Committee recommended that the members be applied to for the expenses incurred. The Committee having received and considered two applications from members of the Society asking for remission of fees for veterinary inspection, were of opinion that the funds of the Society should not be called upon to defray the same.

Colonel KINGSCOTE supplemented this report by stating that at the annual dinner of the Royal College of Veterinary Surgeons on Monday last, great satisfaction was expressed by the head of that College, as well as by the heads of the Royal Veterinary College and the Edinburgh Veterinary College, that the Royal Agricultural Society had resolved to offer prizes to encourage students in the study of cattle pathology. A great wish was expressed by Principal Williams, of the Edinburgh College, that the Society should hold the students there; but, as he (Colonel Kingscote) ventured to suggest on that occasion, this would be treading on the toes of the Highland and Agricultural Society. However, as that Society was now altering its arrangements with regard to the Veterinary Schools, he begged to move "that it be referred to the Veterinary Committee to consider whether prizes, open to all the Veterinary schools, can be offered in conjunction with the Highland Society."

The Earl of RAVENSWORTH pointed out that if the prize scheme were extended to Edinburgh, it would only be just to extend it to Dublin.

Colonel KINGSCOTE replied that there is no Veterinary College at Dublin.

Mr. DENT pointed out that the Society should enter into communication with the Highland and Irish Societies, with a view of ascertaining whether the three bodies could combine to give prizes to students of cattle pathology in any portion of the United Kingdom. At the same time he pointed out that the providing of facilities for giving these students a practical knowledge of cattle diseases, was a matter of greater importance than the offer of prizes.

Earl SPENCER agreed as to the advisability of extending to Ireland the advantages extended to England and Scotland. It was true that Ireland possessed no Veterinary College, although one was very much needed there; but probably students would present themselves from the Agricultural College at Glasnevin to compete for the prizes in question.

Colonel KINGSCOTE said that the subject to which Mr. Dent had alluded had been, and was still being, very much canvassed both by the Royal College of Veterinary Surgeons and the Royal Veterinary College. It was a most difficult question, for although the Royal Veterinary were prepared to take diseased animals free of charge, in practice this offer was not accepted. The matter would not be lost sight of, but there were immense difficulties in the way.

The report of the Committee was then adopted.

#### EDUCATIONAL.

Mr. DENT (Chairman) reported that fourteen candidates, whose ages varied from 18 to 54, had entered their names for the senior examination. Of these, twelve attended the examination, and three succeeded in satisfying the examiners in all the necessary subjects, thereby gaining the first-class certificate and life membership of the Society, as well as qualifying themselves to earn payments as teachers of the principles of agriculture under the Departments of Science and Art. The successful candidates were:—

Brooke-Hunt, A. E., 792 marks; first-class certificate, life membership, prize of £25. Educated at Cirencester.

Gover, Lawford, D., 679 marks; first-class certificate, life membership, prize of £15. Educated at Cirencester.

Wallace, Robert, 534 marks; first-class certificate, life membership, prize of £10. Educated at Edinburgh.

Of the other candidates, two were from Cirencester College, the remainder from private study and other schools; but although in two or three cases the knowledge of agriculture was very fair, yet in other subjects the information was imperfect.

The following table gives the marks assigned by the examiners to the work done by each candidate who passed in the several subjects:—

Names.	Agriculture, 200.	Chemistry, 200.	Mechanics, 200.	Land Surveying, 100.	Botany, 100.	Book-keeping, 200.	Geology, 100.	Anatomy, 100.	Total Marks, 1,200.	Age of Candidates.	Remarks.
Brooke-Hunt, A. E.	163	113	148	72	50	120	65	60	792	25	1st class certificate, Life membership, and £25. Educated at Cirencester.
* * *	*	*	132	45	17	*	*	*	*	18	
* * *	151	102	143	61	61	*	65	58	*	20	
Gover, Lawford D.	112	122	160	69	61	101	64	*	679	21	1st class certificate, Life membership, and £15. Educated at Cirencester.
* * *	189	*	105	68	52	—	63	55	*	21	
* * *	129	116	124	63	—	*	—	—	*	23	
* * *	153	100	125	90	—	*	—	65	*	30	
* * *	*	*	50	—	—	*	—	—	*	22	
* * *	149	110	151	47	67	*	55	50	*	23	
* * *	*	*	37	—	—	*	68	85	*	19	
Wallace, Robert	162	102	120	50	—	100	—	—	534	25	1st class certificate, Life membership, and £10. Educated at Edinburgh.
* * *	143	*	*	*	*	—	65	*	54		

\* Failed.

— Did not attempt

The Committee recommended that the thanks of the Society and the usual honorarium be forwarded to the examiners.

Mr. DENT remarked that this was the first time students from private study had presented themselves for examination, but this time there were two or three who desired to teach agriculture under the regulations of the Science and Art Department. He was sorry to say that although their knowledge of agriculture was fair, they had not been successful in passing the examination, but he hoped that this result would not deter gentlemen in a similar position from entering into future competitions.

The report was then adopted.

#### IMPLEMENTS.

Mr. SANDAY reported that, after full consideration, the Committee had decided that the existing arrangements as to the comparative museum of old and new implements should be adhered to.

In presenting this report, Mr. SANDAY said that the Committee had reconsidered the matter in consequence of a representation from the Agricultural Engineers' Association; but the Committee saw no reason to alter the decision formerly arrived at. The modern implements had been selected from those which had gained the Society's first prize at recent trials, and this they considered the best rule to work upon.

Mr. JAMES HOWARD said that the implement makers had nothing to say with respect to the ancient implements, but they did object with reference to the modern display. The latter was intended to mark the progress in that department up to the date of the exhibition, and the manufacturers maintained that it should be as complete and efficient a display of that kind as could be got together. Even assuming the implements selected for exhibition to have been the best at the period when they gained the prizes offered by the Society—which, of course, was very much open to question, seeing that, to borrow a term from the turf, a great many of the best horses did not run—he pointed out that since many of those trials took place very great and very marked progress had been made in certain departments of machinery. However, the Council having proceeded too far to recede altogether from the modern display of implements, the Agricultural Engineers' Association were anxious to induce the Council to allow these implements to be exhibited on the respective stands of the makers, and not gathered together in one collection, side by side with the ancient implements because there were many implements for which prizes had never been offered by the Society. A resolution to that effect had been passed on the previous day by the Association of Agricultural Engineers, of which he had the honour to be president, and that association comprised nine-tenths of the exhibitors at the Society's annual shows. The actual resolution was as follows:—"The Council of the Royal Agricultural Society of England having determined upon a special exhibition of ancient and modern machinery, this association would respectfully urge upon the Council the desirability of the selected modern prize implements being exhibited in the respective stands of the makers, instead of in the proposed museum," and he begged to move that this recommendation be adopted.

Mr. SHUTTLEWORTH seconded the motion.

The Earl of POWIS said the motion they had just heard would, if carried, defeat the object which the Council had in view. Their desire was to show, in as clear and condensed a manner as possible, a set of implements, going back from the old barbarous styles to the present perfect ones. If the old ones were collected together, and the new ones were not, the public would not have a continuous chain of the progress of the inventions from the beginning to the end. If on getting down to a certain period in the history of the manufacture of implements, just when it became interesting to

see where the different links had been supplied and the improvements made, one would have to be told, "At this point you must leave this shed, and go over about 50 acres to find the next improvement," the student would be in the position of one in a library, the catalogue of which stopped at the commencement of the present century; and he thought that foreigners would be utterly incapacitated from gaining a general view of the progress of the English agricultural implement manufacture.

Mr. JACOB WILSON remarked that the question appeared to have arisen at a very late period; and he reminded the Council that there had been ample time for the agricultural engineers to bring the matter forward, as the intention was made known weeks and months ago. The Council could not shut their eyes to the fact that there were certain makers who pluckily competed for the prizes, and won them; while on the other hand certain manufacturers refrained from taking part in the competitions, and it would be manifestly unfair that the latter should reap advantages which the others had honestly gained. Those who declined to compete must abide by the consequences of their acts. The matter had been previously settled, and ought not to have been re-opened.

The motion was then withdrawn, and the report of the Committee received and adopted.

#### SELECTION.

Earl CATHCART (Chairman) reported the recommendation of the Selection Committee that the Duke of Bedford be recommended to the General Meeting, on May 22nd, as President of the Society for the ensuing year.

In presenting this report Earl CATHCART expressed his regret that the Charter of the Society made an annual change of President compulsory, otherwise there was no one whom the Council would be more pleased to see in the chair than the present President. However, under the circumstances, the Committee considered that on all grounds the Duke of Bedford would be an acceptable successor to his Royal Highness, both to the Council and to the Members of the Society. His Grace had been a working bee in the agricultural hive, and in the most liberal manner he had provided the funds necessary for carrying on the Society's chemical experiments at Woburn. The Committee, therefore, proposed to recommend the Duke of Bedford to the General Meeting as President for the ensuing year.

The report was adopted.

On the motion of Mr. JACOB WILSON, seconded by Mr. BOWEN JONES, it was resolved that the district for the country meeting for the year 1881 should comprise Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire, and Rutland.

The list of members of Council, who retire by rotation, was then laid before the Council:—

Candidates proposed for the Council:—

Lord Moreton, proposed by Colonel Kingscote, seconded by Mr. Bowly.

Lord Ewlyn, proposed by Mr. Wells, seconded by Colonel Kingscote.

The Hon. Cecil Parker, proposed by Lord Chesham, seconded by Sir A. K. Macdonald, Bart.

Mr. Hugh Gorringe, proposed by Mr. Jacob Wilson, seconded by Mr. Chandos Pole-Gell.

The Secretary was authorised to make arrangements in regard to the appointment of Veterinary Inspectors for the London Exhibition.

A letter was read from Lord Lyons in reference to the forthcoming exhibition, stating that at the request of H.R.H. the Prince of Wales it had been brought under the notice of the French Government; and it was announced that animals would probably be sent for exhibition from the national studs.

A letter was read from the Royal Engineers' Committee at Chatham, asking for the loan of the Society's dynamometer, and the Council agreed to comply with this request.

¶ The Council then adjourned till Wednesday, June 4th.

### HIGHLAND AND AGRICULTURAL.

The monthly meeting of the directors of this Society was held on Wednesday, May 7, in their chambers, No. 3, George IV. Bridge. Mr. Mylne, Niddrie Mains, in the chair.

Resolutions were submitted, and unanimously agreed to, lamenting the deaths of the Duke of Roxburghe, K.T., and Captain Tod, of Howden.

#### HALL AND CHAMBERS.

The Hon. George Waldegrave Leslie, who gave notice of a motion at last board meeting in regard to new premises, being unavoidably detained in London, the directors, while approving of it, considered it desirable, in consequence of the opposition which was manifested at the general meeting in January 1876 to the Society's leaving its present hall, that Mr. Leslie should himself bring forward his motion at the general meeting on the 18th of June.

#### GENERAL MEETING.

The half-yearly general meeting of the Society, for the election of members and for other business, was held on the 18th of June, being the first Wednesday after closing of the entries for the Perth show.

#### AGRICULTURAL EDUCATION.

The following letter from the Science and Art Department to the secretary, dated 28th April, was read:—"Sir,—With reference to your letter of the 8th instant, I am directed by the Lords of the Committee of Council on Education to state, for the information of the Highland and Agricultural Society of Scotland, that their Lordships have been pleased to allow holders of the diploma of the society to earn payments on the results of their instruction in the principles of agriculture under this department without undergoing the usual examination. It will, however, be necessary for persons holding this certificate to make application to the department before commencing teaching, in accordance with section 35 of the Science Directory.—I am, sir, your obedient servant. (Signed) NORMAN MACLEOD.

#### VETERINARY DEPARTMENT.

The report of the examinations for the society's veterinary certificate, which took place on the 7th and 8th April, was laid on the table, from which it appeared that six students presented themselves for the final examination, and that the whole had passed.

The preliminary examination of younger students was held at the same time, when 21 entered their names and 14 passed.

#### CHEMICAL DEPARTMENT.

The directors on the 2nd of April remitted to the Chemical Committee to frame a plan of procedure in consequence of the recommendation that the chemist should be authorised to make analyses, at rates to be arranged sufficient to pay him. The Committee met on the 23rd, and having carefully considered the subject, resolved to recommend—1st, That a table of simple but clear instructions for selecting and sending samples of artificial manures and feeding stuffs for analysis be prepared for the use of members of the Society. 2nd, That this table be submitted to the next general meeting of the Society, and authority requested for the following course of action, viz.:—That when any member of the Society shall have purchased artificial manure or feeding stuffs under a written guarantee, and shall have submitted to the Society's analytical chemist a sample of such artificial manure or feeding stuffs, taken in accordance with the Society's instructions above referred to; and when upon analysis the Society's chemist shall discover that serious discrepancy exists between the actual constituents of the article so analysed and the supposed constituents as taken from the guarantee under which the article was purchased, he (the chemist) shall report such discrepancy in full detail to the Chemical Committee, and along with his report shall forward the invoice guarantee, and any other documents he may have received in connection with the case, and any correspondence which may have passed between him and the vendor on the subject; that thereupon the Chemical Committee shall consider the whole circumstances of case, and if it appears to them that in the interests of the

Society and of agriculture generally the facts of the case and the name of the vendor should be published, they shall prepare a report and submit it to the Society's law agents for their opinion, and shall then submit their report along with the opinion of the Society's law agents to the directors of the Society, who shall be empowered to deal with the matter in such way as they shall deem best. 3rd, That a table of the current values at the port of Leith of the units of the various constituents of artificial manures or feeding stuffs in common use be prepared by the chemist periodically, and submitted to the directors for approval and publication.

The board unanimously approved of the recommendations, and remitted to the convene of the Chemical Committee to bring them before the general meeting in June.

#### ARGYLL NAVAL FUND.

In accordance with the recommendation by the Committee in charge of the Argyll Naval Fund, Mr. Chas. Hope Dunsan, R.N., was added to the list of recipients.

### BRITISH DAIRY FARMERS'.

The monthly Council meeting took place at the office, 446, Strand, on Tuesday, May 6th, Mr. E. C. Tisdall, in the chair.

The Chairman reported that, in accordance with the resolution passed at the last meeting, a deputation had waited on the stock prizes committee of the Royal Agricultural Society with reference to offering prizes and medals at the London Show in June, but that in consequence of the lateness of the proposal, it was found impossible to accept the offer.

The alteration of the title to "The Royal Dairy Farmers' Association of Great Britain and Ireland," was moved.

It was agreed that the usual Annual Dairy Show should be held during the month of October next.

Two Committees were accordingly appointed, the one to confer with Mr. R. Jeffery, the managing director of the Company, and the other to draw up a schedule of prizes to be submitted to the Council at the next meeting, in the event of satisfactory arrangements being made in the former case.

Printed copies of the memorandum and articles of association were submitted for inspection, previous to application being made to the Board of Trade for the registration of the Society. The CHAIRMAN moved that a committee be appointed to frame a set of bye-laws, in connection with the articles, but it was decided to place this matter in the hands of the Journal Committee.

The meeting then adjourned to Tuesday, June 3rd.

### SHORTHORN.

A meeting of the Council of this Society was held at the Society's Rooms, 12, Hanover Square, W., on Tuesday, the 6th ult. Present: Colonel Kingscote, C.B., M.P. (vice-president), in the chair; the Earl of Bective, M.P., Sir Wilfrid Lawson, Bart., M.P., Mr. B. St. John Ackers, Mr. H. W. Beaumont, Mr. Edward Bowly, Mr. F. J. S. Foljambe, M.P., Mr. S. P. Foster, Mr. John Harward, Mr. Charles Howard, Mr. D. McIntosh, Rev T. Staniforth, Mr. R. Stratton, and Mr. Jacob Wilson.

The following new members were elected:—Bailey, Crawahay, Maindiff Court, Aberavenny. Barrow, Bridgman Langdale, Synnobe Hall, Mallock. Hargreaves, Samuel, Hazelhurst, Knutsford, Cheshire. Holmes, John, Strandabroony, Donemana, Strabane. Owen, John Dorsett, Plasyn Grove, Ellesmere, Salop.

#### EDITING COMMITTEE.

Colonel KINGSCOTE reported that the Committee had examined the pedigrees of several animals sent for insertion in the forthcoming volume of the Herd Book, and had given instructions to the Secretary thereon.

That with regard to the pedigrees of animals bred out of the United Kingdom, the Committee recommended the Council to adopt the following resolution:

"That the Council find, on the report of the Editing Committee, that it is exceptionally difficult to investigate questions relating to pedigree, when the statements to be investigated relate to transactions which have arisen out of the United Kingdom; they have therefore resolved to confine the

entries in the body of the Herd Book to facts which have taken place in the United Kingdom, and to insert foreign pedigrees in an appendix."

That the Committee recommended that in the case of pedigrees of animals never before recorded in the Herd Book, certificates for the dates of birth in such pedigrees be sent out at once.

This report was adopted.

#### GENERAL PURPOSES COMMITTEE.

Mr. JACOB WILSON reported that the accounts for the month of April had been examined by Messrs. Quilter, Ball, and Co., and the Committee, and were found to be correct, that the secretary's petty cash account had been examined and passed, and showed an expenditure of £17s. 11d. during the past month; that the receipts for the same period had been £124 17s. 6d.; the balance of the Society's current account at the bankers being £607 11s. 2d.; and that the Committee recommended that arrangements be made with the Society's auditors for the auditing of the Society's accounts to the end of 1878, previous to the annual general meeting of members.

That it was desirable that the Articles of Association should be altered and amended in the following respects:—

Rule 8. "Sixteen members" altered to "fifteen members."

Rules 9 to 16 (both included) rescinded, and the following provisions substituted:—

The Council to consist of its present members with power to these to increase their numbers to 33, the distinction between honorary members and ordinary members to be abolished.

The members to be arranged by the Council in three lists of eleven each, to retire at the times appointed by the Council, eleven retiring in each year.

The Council to be renewed by yearly elections of eleven members to serve for three years.

The quorum of the Council to be six.

That proper notices be given for carrying out the above alterations and amendments at once, and that the General Purposes Committee be authorised to carry out the above resolution, and to settle details.

On the motion of the TREASURER, the Committee recommended that all cheques for payments by the Society be drawn upon their Treasurer, at the Society's bankers; and instead of being signed by the Treasurer as heretofore, be signed by two members of the General Purposes Committee, and countersigned by the Secretary, and that arrangements to carry out this resolution be made with the bankers accordingly.

This report was adopted.

On the motion of Mr. E. BOWLY, seconded by SIR WILFRID LAWSON, Bart., M.P., it was unanimously resolved—

That application be made to the Royal Agricultural Society for permission to hold the annual general meeting of the members of the Shorthorn Society in the Members' Tent in the showyard at Kilburn, on Wednesday, the 2nd of July, at noon.

In accordance with the Articles of Association, the Council then prepared two lists—the one a list of the members of Council retiring at the forthcoming annual general meeting, and the other a list of a like number of life members of the Society proposed by the Council to fill the vacancies.

#### ANNUAL MEETING, 1879.

#### LIST NO. I.—BRING LIST OF MEMBERS OF THE COUNCIL WHO RETIRE BY ROTATION.

At the annual general meeting of the Society to be held in the present year, ten members of the Council will retire from office by rotation, in accordance with the articles and laws of

the Society, and the following list, prepared by the Council contains the names and addresses of such retiring councillors, and a report as to their several attendances:—

ATTENDANCE, FROM THE FORMATION OF THE SOCIETY (FEBRUARY, 1875), TO THE PRESENT TIME.											
NAMES.	Monthly Councils.					Monthly Councils. Total, 40.	Special Councils. Total, 3.	Com- mittees.	Attendances.		
									No. of Meetings.		
	1875	1876	1877	1878	1879						
Ackers, B. St. John (elected November, 1877), Prinknash Park, Painswick, Gloucestershire .....	9	10	9	8	4						
Bowly, E., Siddington House, Cirencester, Gloucestershire .....	5	5	5	3	2	1	9		1	1	
Chaloner, R., King's Fort, Moynalty, Ireland .....	7	9	6	5	3	1	20		46	36	
Chandos-Pole-Gell, H., Hopton Hall, Wirksworth, Derbyshire ..	5	3	2	3		13	30				
Cruickshank, J. W., Lethenty, Inverurie, N.B. ....											
Exeter, Marquis of, K.G., Barchley House, Stamford .....	4	2	5	3	3	3	17		18	5	
Howard Charles, Biddenham, Bedford .....	2	1		1	4	4	2		2	41	
Penrhyn, Lord, Penrhyn Castle, Bangor, N. Wales .....	5	5	4	5	2	21	25		45	16	
Sheldons, Lord, Latham House, Ormskirk, Lancashire .....	5	7		4	1	95	2			17	
Tracy, G. Murton, Redlands, Edenbridge, Kent .....											

#### LIST NO. II.—BRING LIST OF MEMBERS PROPOSED BY THE COUNCIL TO FILL THE ABOVE VACANCIES:—

Ackers, B. St. John, Prinknash Park, Painswick, Gloucestershire.

Bowly, E., Siddington House, Cirencester, Gloucestershire.

Chaloner, R., King's Fort, Moynalty, Ireland.

Chandos-Pole-Gell, H., Hopton Hall, Wirksworth, Derbyshire.

Cruickshank, J. W., Lethenty, Inverurie, N.B.

Howard, Charles, Biddenham, Bedford.

Penrhyn, Lord, Penrhyn Castle, Bangor, N. Wales.

Sheldons, H. J., Brailes House, Shipton-on-Stour.

Skelmerdale, Lord, Latham House, Ormskirk, Lancashire.

Tracy, G. Murton, Redlands, Edenbridge, Kent.

A communication from the National Agricultural and Industrial Association of Queensland asking for that association to be enrolled as a subscriber to the society having been read, the secretary was directed to say in reply that the association could become a subscriber on the payment of eleven guineas, for which the future volumes of the Herd Book would be forwarded as issued.

A letter from a member of the society was read, calling the attention of the council to the excessive rates charged by several railway companies for the conveyance, in horse-boxes, of Shorthorns to and from various parts of the country, and giving details of several cases which had come under his notice. The question having been considered it was resolved that representations be made to



to the various railway companies thereon, with the view of obtaining a reduction in these rates, and the adoption of a more uniform scale of charges.

Colonel KINGSCOTE, C.B., M.P., and Mr. JOHN HAWWARD agreed to bring the question before the railway companies, and report thereon at the next meeting of the Council.

The next meeting of the Council was fixed for Tuesday, June 8, at 8.30 p.m.

### ENGLISH CART-HORSE.

A Council meeting of this Society, the Earl of Ellesmere in the chair, was held on May 6 at the Inns of Court Hotel, Holborn. We have not space for a full report of the proceedings at this and the annual general meeting which followed it.

It was agreed that the Council confirm the recommendation of the Finance Committee for rescinding the minutes of May 23, 1878, and that in future the secretary's travelling and incidental expenses be under the control of and paid by the Finance Committee.

Mr. F. STREET moved

"That when the 1st of the month falls on a Tuesday, the Council meeting be held on the second Tuesday of the month."

This also was agreed to.

On the motion of EARL POWIS it was resolved that it be an instruction to general meeting in consequence of some misapprehension on the subject, to say that the English Cart-horse Society is a limited company, and is so registered.

After other business had been transacted, the general annual meeting of members was held, the Earl of Ellesmere in the chair.

The Chairman explained that as long as the association did not make a profit by the sale of the Stud Book it was a limited company, and he hoped this would dispel the fears of many members and would-be members.

Mr. W. GILBEY, chairman of the Finance Committee, read the report. The financial year began on the 13th of April, and terminated on the 31st Dec., 1878. The total income up to that date was £817, and the expenditure £296, leaving a balance of over £500. This statement with details had been ordered to be printed and circulated among the members. From April 13th, 1878, up to May 1st, 1879, the receipts amounted to £1,046, and the expenditure to £298 9s. 4d., leaving a balance of £746, of which £344 was still due by the members of the Society.

The report was adopted *unanimously*.

Mr. James Harris, of 8, Old Jewry, was appointed auditor at a salary not exceeding 10 guineas.

The PRESIDENT informed the meeting that the proof sheets of the Stud Book had been printed down to the letter H, and would soon be finished.

A long discussion took place on the proposal to alter the name of the Society, but no resolution on the subject was adopted.

## Farmers' Clubs.

### CENTRAL.

A meeting of the Central Farmers' Club was held on May 5th at the Inns of Court Hotel, Holborn, Mr. Phipps, M.P., in the chair, when Mr. F. Street, of Somersham Park, St. Ives, read a paper on "The Management of Heavy Land," as follows:—

In January I wrote to the secretary, suggesting that the paper to be introduced to your notice this evening should be under the above title, instead of the one on the card, viz., "The Management of Heavy Land;" but as the cards had that day been posted, it would have necessitated the trouble of again sending to every member of the club. I will therefore, with your permission, make this slight alteration.

A difficult part of my subject is to show how in these times loss is to be avoided, and still more how a profit is to be made. Four successive bad harvests and other causes have cast a gloom over heavy land farmers unprecedented, and indeed

over the holders of every description of land. In every county farms are being thrown on the landlords' hands or going out of cultivation altogether. This is a question that affects not only landlords, particularly those of limited incomes or owners of glebe lands, occupiers, but labourers, tradesmen, and commercial men; indeed it may truly be considered a national calamity. You cannot take up a paper without reference being made to this depression, and remedies suggested. Supply and demand will assuredly regulate rents; if times continue bad a general readjustment must take place. Another remedy suggested is the curtailing of farmers' personal expenses. It is with regret, deep regret, I see a disposition to grudge the agriculturist his proper position in life. On some large estates of late years men of a very different stamp have been selected from those that the fathers of the present owners thought eligible tenants, men have been selected of whom a well-known member of the club observed "who do the work of two labourers and live at the expense of one." The result of the depression has been that these men were the first to go to the wall.

At the same time there is a general wish, by education and other means, to lift the labourer up. Now I rejoice that there are small holdings and small holders, and that the condition of labourers has had attention much needed and further needed of better homes, improved sanitary inspection, and efficient education for their children. But in the interest of the class to which I belong, I say allow us to educate our own children in our own way, especially as the education is at our expense, and let farmers take their proper place in the social scale. Curtailing of personal expenses need not occupy our time this evening. What I fear is the effect for the future of the continual curtailing of the expenses of the farm—by using less cake and corn, less artificial manure, less labour, and less stock of all descriptions. This is indeed a serious matter. Foreign competition in both corn and stock is thought by many to be the one and only cause of depression, and that protection is only wanted to put us right again. If protection is ever returned to, it will be as a means of relieving the British taxpayer and the manufacturer—not the British farmer. If we spend the whole evening on this question it would be a waste of time; I will, therefore, in passing say, cultivate those crops and breed that description of stock that pays best, the Americans cannot successfully compete with us in some things, such as malting barley, milk for large towns, rearing young stock and lambs. The only relief I can see is a return to more genial seasons.

With improved drainage and steam cultivation, followed by the dry seasons of 1868, 1870, 1873, and 1874, when the crops on the light lands were almost worthless through the drought, there was a general wish to get rid of gravel land and farm heavy land, for wheat on heavy land yielded both quantity and quality; and here too on the heavy land the maltsters had to look for the best barley, and the best crops were found of clovers and of mangel warts, that revel in sunshine. In consequence, heavy land in the market was worth £1 10s. an acre, or more, in value, and rents rose in the same ratio. But the superabundance of rain, coupled with low temperature during the last four years, has completely changed this. On heavy land in the best of condition, and however well cultivated, after the wet May of last year all hopes of getting more than half an average crop of barley were scattered to the winds, and this was followed by a wet harvest, and consequently inferior quality.

Thousands of acres looking well in April, 1878, might reasonably have been expected to yield 5 qrs. per acre (I am purposely putting it low), and make 45s. per qr., or £11 5s. per acre. In the majority of cases not more than 2½ qrs. were grown and sold at 30s. per qr., or £3 15s. per acre, or a difference of £7 10s.—to one growing 100 acres of barley, a difference of £750 on one sort of produce alone. Mr. P. on 50 acres of land after dead fallow, or two years' rest and expenses, rented at 32s. per acre and 5s. tithe, sold 42½ qr. head at 32s. and had 12½ tail for grinding. Mr. B., one of the cleanest and highest farmers in my own county, writes me: "Harvest 1877 not a good one, but 5 qrs. barley sold at 44s., £11; 1878, 3 qrs. barley sold at 41s. 8d., £6 5s." Difference on 67 acres of £1 16s. per acre. Another grower says he made £500 less than he could reasonably have expected from his barley; but I will not occupy your time further with this. How do personal expenses or a reduction of rent meet facts like these?

During the past four years all cereal crops have been affected by the elements, and a small yield of inferior corn, coupled with low prices, has tended to the general depression—as the cost of production has been more than the produce realized. During the last four years the average of all crops may be considered to be 13 bushels below an average on heavy land; this, at £3 per qr., is £3 per year, or £13 per acre in four years, a sum more than used formerly to be thought sufficient to take a farm with.

Since writing this part of my paper some weeks since, I have asked the opinion of valuers in several different counties, in every instance they say my estimate of 13 bushels deficiency through the last four wet seasons, or £3 per year, or £13 the four years, is below the mark, inasmuch as two years the beans and peas were a total failure. Now, supposing the rent of the land was 80s. per acre and the labour 30s. (both would be more), if land had been rent and labour free this would only have amounted to the same sum as loss through the bad seasons. A manager of a bank said to me, "This loss of tenants' capital through no fault of their own is of most serious importance, and how those that have kept on have managed to do so is a mystery to me."

A clergyman said to me, "Seasons are not in the hands of man. I think a day should be specially set apart to intercede to a higher power." True it is if wet weather should set in the next three weeks it would cause a further loss to barley growers of from £3 to £5 an acre in the growing crop.

I do not wish to dwell on the injustice of the malt tax, beyond remarking that had there been no tax the lower qualities, which it did not answer the maltsters to pay 8s. 8d. duty on, would have been used for malt instead of sugar, treacle, and molasses, and might reasonably be expected to have made 35s. instead of 30s. per qr. As suggested at the Central Chamber of Agriculture, the time has now come when the Government may rightly be asked to shift this burden—which ought to be repealed altogether—from a malt to a beer tax. With a return of more genial seasons I take barley to be the mainstay as a corn crop. In quality of barley foreigners cannot approach us.

Drainage, its necessity, and the best mode of carrying it out.—Good drainage is the foundation of the successful farming of clay land. I have always farmed a portion of tenacious land, and my views are against general opinion. Judging from what I see of the number of narrow ridges and open furrows, which I consider not only unnecessary, but in most cases injurious, if land is properly cultivated to a sufficient depth. More than twenty years since my father had two of the heaviest fields on his old Wilden Farm drained three feet down the old furrows. It has since been ploughed in 22 yard lands in an opposite direction, and I have never seen it wet since. I have two heavy-land fields, beside the Great Eastern Railway at Somersham; the old labourers told me they must be in small lands and have water gutters. These fields are now ploughed a chain apart in a contrary way to the drains, and, although on a hill side, are perfectly free from standing water. I think there is no better way than draining down the old furrows, but I think mistakes are often made in throwing high-backed lands down too suddenly.

In a conversation with a land agent last autumn, he remarked that on several estates which he had the management of, and on which the landlords wished to have them drained on the Government system, 4 feet deep and 11 yards apart, the tenants refused to have the work done. With the tenants I entirely agree. I have no objection to deep drainage, indeed I have seen three or four drains 5 or 6 feet deep in a gravel subsoil drain a large field. But on stiff gault land I would much rather have drains three to the chain, and not exceeding 3 feet deep. I have known cases of land being drained under the Government plan being perfectly useless, and after being drained by the tenant at his own expense, with bushes near together, not more than 2 feet 6 inches deep, answer well. Let those who believe in very deep drainage on heavy land continue the system, but I do think the Government should be asked to relax the rule of one uniform depth and width for all soils, and allow those who prefer three drains to the chain instead of two, and a depth of 3 feet instead of 4 feet, to have them. I hope an expression of opinion will be given on this point in the discussion following. In all cases it is much better to drain into main drains than into open ditches.

Two years since I had several fields of grass land drained with the Mole plough, drawn by steam power, as I have every reason to be satisfied with it. I recommend a thin furrow of turf to be first ploughed by two horses and turned back after the Mole plough; for not having adopted this precaution I found, in dry weather, the drains opened from 3 to 4 inches at the top, so that you could see to the bottom of the drain from 2 feet 6 inches to 2 feet 9 inches deep. The main drain should be first dug and the openings for the eyes made ready to drop the Mole in, and afterwards connected with five or six 2-inch pipes. I had also some arable land drained by the Mole plough every 5 or 6 yards apart; price paid per acre £1. I found coals and water. Where land has been previously drained, and the drains do not act, supplementary drainage of this sort, if it only lasted a few years, would pay. But I would not advise anyone to try it on very flat or uneven land, as there is a danger of the proper fall not being maintained.

#### ARTERIAL DRAINAGE.

It may be asked, what has arterial drainage to do with heavy land? I think very much; for it is beginning at the proper end, viz., the outfall. For generations after one or two wet seasons and floods, this question in certain districts has been talked over, and with a return of dry seasons, forgotten. A very able paper was read before this Club by Mr. J. A. Clarke, February 7, 1869, which I would advise all members to refer to. It will not do for me to take up much time in referring to the "Rivers Conservancy Bill" now before Parliament. It is so large a question the Club might give an evening to this subject alone. It is a national question, and ought to be treated as such. Would that it had received the same amount of interest at the hands of the Legislature as foreign questions have done. Some clauses of the bill will receive opposition, for instance, the taxing of high-land owners (for it should be a landlord's tax), to pay a proportion of the rate. As a high-land farmer myself, I think it is only right that those who help to cause floods by sending the water down so much quicker, should contribute. Further, that towns receiving sanitary benefit should do so also.

Mr. Clarke remarked in the paper alluded to that "there is a very large extent of land not subject to actual inundation, but which lying immediately adjacent to the drowned flats, and delivering its main water upon them, is incapable of efficient subsoil drainage (with all the good farming dependant upon it), because the floods dam back the overflow from the main ditches, overriding the outlets of the under drains just at that season when their rapid emission is most required. But the evil effects of river floods are not only agricultural; for, in the neighbourhood of towns, just where the meadows may be rented as accommodation land (and the proprietors might, therefore, doubt the advantage of drying them), sanitary considerations demand our care. Every man thinks his own home peculiarly healthy, until the Registrar-General dispels the pleasing illusion, and the tabular statistics of public health prove most undeniably that districts abutting upon a flooding river, or intersected with marshy hollows and choked rivulets, are above all others (excepting crowded and filthy cities) the haunts of fever and glandular disease; and typhoid and milder but enfeebling maladies constantly visit the villages that inhale the hot weather malaria of the swampy meadows; and the smaller towns and parishes, flanking the streams, are the hotbeds of intermittent fever, rheumatic and liver complaints, and serofulous and pulmonary disorders aggravated, if not originated, by the cold damps and poisonous exhalations from which the inhabitants have no means of escape. Trunk drainage, however, would prove a marvellous prevention." So wrote Mr. Clarke twenty years ago, and although local and sanitary boards have since done much for our towns and villages, yet still the worst evil remains. One other remark and I have done with this part of my subject, inasmuch as in wet seasons there is a desire to get rid of water—the want of it in our heavy-land districts, in very hot summers, causes serious inconvenience. What is to become of the heavy arable land? Some will say lay it all down with grass; this would necessitate almost the depopulation of whole parishes, as very little labour would be required, and all the dead stock of the farm would be useless, and, besides, it would take years to make the pastures of much value, and without straw no stock could be kept in the winter.

Where heavy land has chalk stone in it, good sainfoin can be grown, which will last for six or seven years, then, when it grows over, beans, white, and red clovers could be added. Sainfoin will grow on some of the poorest land, and makes valuable hay; the aftermath is the very best feed for lambs when weaned, and even in wet seasons it is quite the exception for them to scour when kept upon it. Lucerne can be treated very much in the same way. Instead of laying all down to grass or artificial grasses, I think an effort should be made to raise more stock, or keep flocks of breeding ewes. The dearest things at the present time are young steers or heifers, with from £10 to £16; I am referring to land that will not fatten stock. Where land is good enough to fatten a bullock, it would be absurd to raise young stock.

When near to a railway station, nothing has paid better than sending milk to London or other large towns; always a refrigerator should be used to cool the milk. Then other cows must be kept to rear calves. Where butter is made, the calves, after having new milk for the first two or three weeks, will then do with skim and linseed gruel. Calves and all other young stock should never have a check. It is important to use a thorough-bred bull. I am fully aware that all kinds of stock and sheep are much lower this season; this is partly owing to the severe winter and scarcity of keep, as well as other causes. Still, at present prices, I consider young stock have paid their way, but fattening things have lost money. If a breeding flock is kept, it is better to sell the lambs before winter; there is mostly a demand for them to go into the turnip districts. After the lambs have left the ewes, the flock can be kept at little expense; they can run on the stubbles and clover leys until the following November, and should then, if put on grass, have an allowance of dry food, say griddled oats and malt dust mixed with chaff. This should be continued until lambing, without roots; after lambing, a few mangels given on a piece of ryegrass, with a pen forward for the lambs to run out and have corn. After that rye, and tares, and clovers, and what ought to be grown on every farm in the kingdom—cabbages, to be carted on to the aftermaths of clover for the lambs when weaned. It is utterly useless for anyone to keep a breeding flock unless he makes up his mind to be prepared with suitable food to follow on. To prove that heavy-land farms are adapted for breeding flocks, I would mention the success of the late Mr. Benjamin Harradine, of Cotton End, Mr. James Pestle, of Wilden, and the late Mr. Ulysses Paine, of Goldington, all of Bedfordshire. Mr. Toovey, of St. Granden, Cambridgeshire, for years supplied the markets of Hitchin, Bedford, Cambridge, and St. Ives with early fat lambs. When I went to his farm some years since, I found the ewes kept in the yard on straw and mangels, not much corn, as Mr. Toovey preferred keeping the ewes on again, instead of fattening them with the lambs; the lambs run through creeps, having all the cake and corn they could eat, which averaged about 10s. per lamb. I never saw a flock in a more healthy state. Hearing of some who had had luck last year, on inquiry I found many had had cold roots all the winter and little dry food; and further asking what sort of a shepherd they had, the reply was, in more than one instance, "one of the labourers attends to them." This is being prunny wise and poned foolish. I could mention whole parishes where no breeding flocks are kept, and very little stock raised. This, I am afraid, is partly through the losses by cattle plague, pleuro-pneumonia, foot-and-mouth, and other contagious diseases, followed by bad seasons. Since the passing of the Cattle Diseases Bill I have never known the health of the stock of the country in such a satisfactory state, and we ought to feel much indebted to those who, year after year, advocated the adoption of efficient legislation.

On very hard working land it does not pay so well to breed many young horses, as there is danger of the mares eating their foals; but a few with care may be bred to replace the older ones. When colts are dear, and they have to be bought in, the older ones are often kept on a year or two after being past work. I think it a bad plan to have much old stock of any description on the land.

All young lads after leaving school should be brought up many to thoroughly understand and master the practical part of their future business; should be up in the morning to see the horses off, the stock or sheep fed, and in feeding time take an odd hand and keep the drill going at breakfast time; know when teams have done a fair day's work. The lengths of each

field should be known, so that each team does the same amount of work. If 20 chains long it will take 11 yards to the acre, or 22 rounds of 9-inch furrows; if 10 chains 22 yards, or 44 rounds, to plough an acre, I think an acre a good day's work for ploughing in summer, and three rods in winter. When once accustomed to have the work set them, I have always found labourers fall in with the plan. Young farmers should also understand the steam-engine and proper working of other labour-saving machines; should know the sort of food best suited for all sorts of stock, and quantity required. Land surveying and measuring thatching should also be practised. To know how to buy and sell both stock and corn, and how to manage labour and the value of all piece work is of the utmost importance. Now I do not want it for a moment to be supposed that I would keep the young farmer to manual labour. Nothing of the sort, except as a means of learning his business, in the same way as I have seen clergymen's sons and others, studying as civil engineers, put on the white jacket and cap, and master the mechanical part, without which knowledge they could not expect to succeed in after life. Youths in towns after business have their pleasures and amusements, and by all means let these isolated in rural districts have theirs also, so that the taste is not encouraged to the neglect of business. I have heard one of the most deservedly respected and opulent agriculturists of the present day say that he held the first winning plough at his county ploughing match in 1844. When at Braham just before last Smithfield Show, in speaking of the late Mr. Jonas Webb, of world-wide reputation, a shepherd remarked, "I have seen Mr. Webb, when his sheep were being prepared for exhibition, assist himself, and even have his meals sent to him." "Seest thou a man diligent, he shall stand before princes."

We are often told "that property has its duties as well as its privileges." Now, I do think, if, as owners of land, more of our nobility would follow the good example of our Majesty the Queen, H.R.H. the Prince of Wales, and others I will mention as breeders and exhibitors of first-class stock, sheep, and horses, they would not only give a great impetus to agriculture, but would themselves feel more at home as chairman of agricultural societies, or in conversation with their tenants. John, Duke of Bedford, by the formation of the Smithfield Club and Woburn Sheep Shearing, and Mr. Cooke, of Norfolk, have left names that will never die. In Shorthorn, the Dukes of Devonshire and Manchester, Earl Danmora, and scores of others too numerous, have distinguished themselves. In sheep, the Dukes of Richmond and Marlborough, Lord Chesham and Walsingham; in cart horses, the Duke of Westminster, Earl Eilemere and Spencer, and the Hon. E. Coke have raised the public tone of an hitherto much neglected branch of agriculture. At one time it was thought quite derogatory to own a cart stallion; at the present day, he that does so, if a good one, is considered a benefactor to his country. These noblemen have gained their success by their wise discrimination in selecting good men as agents, and placing implicit reliance in them. It is only fourteen months since I had the pleasure of reading a paper before you on cart horses; I will not, therefore, dwell longer on this point.

In taking a farm wet, and out of condition, the best way is to drain and dead fallow the whole. Immediately after harvest, or if a steam cultivator can be had as soon as a field is cleared, the stubbles should be broken up for the future root crops—mangel and cabbage. It is far better to manure highly, so as to yield the greatest quantity on the smallest space of ground. Steam cultivation should be followed up by manuring and ploughing in a frost, as much of the success of a root crop depends, as does barley, on a fine tilth, and this cannot be expected if ploughed in the spring. The general practice of dead fallowing is to break up in May, and if only twitch has to be got rid of a better time could not be selected. But when wild oats, charlock, wild ranunculus and other annual weeds grow, it is a far better plan to sow tares the previous autumn to get them to germinate, or otherwise what was supposed to be a clean fallow would be smothered with these pests the following spring.

Heavy land farmers should take advantage of all dry weather and get forward with ploughing before harvest. A crop of wheat cannot be expected after ryegrass, if broken up later than the middle of July. I have often known from one to two quarters more wheat grown, and much more straw,

when clover leys have been broken up thus early. Indeed it acts as a bastard fallow. Light land, on the other hand, should not be broken up early, as it benefits by the solidity of the clover roots.

I believe in a change of seed corn, and every other year have a quarter of wheat from Mr. Benham and a quarter of barley from Major Hallet to sow each on about five acres of land. Triple whippie-trees should always be used for three horses harrowing; as one man or lad can drive the three horses abreast. On land that is called three-horse land, four horses will, at various seasons of the year, draw a double-furrow plough, thus saving two horses, a man, and a boy. I greatly prefer pieces to day-work, such as hoeing of all descriptions, tying, carting, thatching all corn in harvest, manure filling and spreading, draining, hedging, and ditching, and in fact every thing that can possibly be let.

I always dread the approach of hay time, for as the work depends so entirely on weather it must be done by the day, and to see the time wasted in meals, or the slack manner of many of the operations, contrasts very unfavourably with piecework in harvest. I always prefer hay to be stacked at a distance from the homestead, trussed up at the stack, and so many trusses allowed for each description of stock. If near home, and stockmen have the run of the stack, the value of it is never considered by them.

In all matters the master must be the commander-in-chief, and not be led by the opinions of others. On every farm jealousies will occur with men. It will never do to have favourites; far better to part with the best man, or one that thinks he is the best man on the place. On every large farm sufficient cottage accommodation should be found for the foreman, shepherd, stockmen, and horsekeepers. Considering the best and most trusty are required for these posts, and that they have to give early and late hours as well as Sundays, I do not think they are so well paid as men working at piecework; I give them two shillings a week additional; I let them have a cottage and garden also rent free.

On my occupations I have perfect freedom to crop and farm as I think best, consistently with good husbandry, and I trust the day is not far distant when all my brother farmers—who are good ones—will be able to say the same. If compensation were given for unexhausted improvements, it would doubtless prevent farms being run out towards the latter end of tenancies. I have said the young man should be early initiated in his business and instructed how more stock and sheep should be kept, but the question, the great question is, "How can this be done without more capital?"

There are many questions I have not touched upon, but which I trust will be taken up in the discussion following. On this question of capital I would, by way of conclusions observe that upon it hinges the future prosperity of agriculture and of England. In a paper read before this Club in 1875 by Mr. James Howard, he concluded with the following weighty words, with which I feel I cannot do better than close this paper. Mr. Howard remarked: "We have a limited area on which to raise the food of the people; we have a population fast growing in numbers and in purchasing power; our fields and homesteads do not yield that amount of food of which they are susceptible; increased production necessitates the application of more capital, to attract the necessary amount of capital security is indispensable. The prosperity of the tenant must be secured to him by an indefeasible right. England—and I may well include Scotland—has a tenantry of which, for wealth, intelligence, and enterprise, no other part of the world can boast; through their force of character, and in spite of repressive laws, our agriculture has attained to a higher degree of excellence than that of any other nation. Let these repressive laws be removed and an opposite policy inaugurated. British agriculture would enter upon a new era of progress and prosperity, would speedily attain such a degree of perfection, that no fears need then be entertained of our being able to feed the teeming and ever-increasing millions of our population."

Mr. T. BOWICK (Bedford), in opening the discussion, observed that the subject was not a very taking one, although there was certainly a good deal to be said respecting it, as something like three-fifths of the land in this country might come under the designation of "heavy land." The time was in the records of the Club when the subject discussed was how to break up grass land, but for the last ten years or so the tendency had been in the other direction. Many breeders and

feeders consider that, now that the Atlantic was so entirely bridged over, the breeding of stock did not pay so well as formerly. In his opinion one great drawback to the success of farming was that the country was not opened up sufficiently, especially in the poorer and heavy land districts. A farmer had told him that his farm was worth £100 more a year to him because it was within half a mile of a railway station, and it was certainly a question well worth considering whether the farming interest could not be materially assisted by a development of railroad communication on the narrowest gauge system alongside the chief main road. It would be a great boon to places at present ten or twelve miles from a railway station, if such a plan was carried out. In the event of such a development of railroad communication in the direction suggested, he was sure that in many places land would increase in value from 2s. 6d. to 5s. per acre.

The Rev. E. SMYTHIES (Hathern Rectory, Loughborough) said there were gentlemen present who were able to give important information and instruction on the question dealt with by the writer of the paper. As there was strong land in the country some one had got to farm it, and a question of vital importance which necessarily arose was how it could be farmed with profit. He hoped before the discussion closed they would hear something of the experience of gentlemen in different parts of the kingdom as to whether it was more profitable to continue growing corn, or to lay the land down to grass. They wanted a more accurate definition of what strong land was. His idea of strong land was, where in ploughing a piece of soil ran before the plough and stood up like a column and remained there all the winter. The best method of dealing with strong land was a debatable subject, and must be looked at from different points of view. An important point to be considered was that of drainage and the best method of draining. It was sometimes the custom to find fault with the Government regulations in connection with the Enclosure Commissioners, but the Commissioners had no predilection for one depth of drainage over another. It was clear, when the Commissioners laid down a rule that the drainage should be four feet in depth, that they came to that decision on the best evidence they could get at the time. He was inclined to think that four feet was not too deep. As to the direction of the drains, all he could say was that on his farm the land where the drains ran across the furrows was more satisfactory in wet seasons than where the lands ran parallel with the drains. A drainage of four feet was not an unnecessary depth, although there might be cases in which three feet six inches might be sufficient, but he would never have it less than the depth last named. A good deal required to be done before they got the land into proper condition, and he hoped some gentlemen present would give the meeting the benefit of their experience of steam cultivation on strong land. In his opinion it was essential they should deepen the soil. It was true that steam cultivation did not apply to the question of drainage, but it applied to the great question of increasing the staple of the soil and the stirring up of those mineral constituents which were so valuable. He considered they owed a debt of gratitude to Mr. Lawes for his experiments, and especially for his information as to the value of straw. There was scarcely anything more startling than that gentleman's confident statement that the manurial value of straw was almost nil. According to Mr. Lawes they might put straw into the land, but it would not improve its character. It would be far better to allow a farmer to sell the straw and replace it by means of steam cultivation and artificial manures. The question was, had the growing of wheat to a profit in this country come to an end? This was a question which they would have to consider. In many provinces of India, where scarcely any wheat was grown ten years ago, there were now many thousands of acres sown with that grain. The wheat thus grown was taken to Bombay and shipped to this country at a profit. It was, therefore, a grave question whether in England they could go on growing wheat at a profit. It must not be forgotten, however, that laying down grass was an expensive process, and that there were many things to be considered in connection with it. Nevertheless, he thought a good deal of land, if properly drained and laid down in grass, would be better occupied than if kept under the plough. He did not consider it necessary to have straw for stock to lie upon, as, from what he had seen, cattle could apparently lie down as comfortably on bare stones. He hoped to hear something

which would show them how to make a profit out of the strong land which so many of them occupied.

Mr. J. WALKER (Mattersea Hall, Bawtry) objected to the view taken by the reader of the paper, that the uplands should have to pay for the lowlands. Except in isolated cases he considered it a co-operative matter, and ought not to be interfered with. If it were desirable on sanitary grounds he could understand it, because then all were alike interested, and everyone should pay in his degree.

Mr. L. A. COUSSEMAKER (Westwood, Guildford) observed that he had been a farmer for many years. It was forty years since he first commenced draining. He drained his land well, but he found that very deep drainage did not answer. There was nothing better for heavy land than drainage, but people expected too much from it. The greatest amount of drainage would not convert clay land into sand. He had every implement that could be desired, and all kinds of husbandry work could be done on his farm without a horse putting a foot on the land. He had always ploughed his land as deep as he could, and, if possible, he got it done by Christmas in order to have the advantage of the frost. He had found that system advantageous. He did not, at the same time, say that he made any profit from farming. (Hear, hear.)

Mr. H. TRETHEWY (Silhoe, Amphilil), said the Club ought to feel much obliged to Mr. Street for the valuable paper he had read. He could not, however, help expressing a wish that he had dealt more fully with the question of the cultivation of heavy land, to which he had drawn attention, and had stated the rotation of crops it would have been feasible to adopt, and other matters relating thereto. He thought it was very important in dealing with such land to get all they could off in the shape of green crops during the summer. It was a matter of the utmost importance to ascertain how heavy land could be cultivated at a profit. With regard to drainage, he desired to say that there was some misapprehension concerning the action of those companies who advanced money on the Government plan. The inspectors appointed by the Enclosure Commissioners were not very rigid in their rules. They did not insist on eleven yards wide; and having had some thirty years' experience of draining under them, he could fairly assume to know something about their system. When thirty years ago, the Government granted twenty millions of money for the purpose of draining heavy lands, the country was very much under the same state of things as it was at present. The money then granted was to be laid out subject to the approval of inspectors appointed by the Enclosure Commissioners. It would be remembered by some gentlemen present at the meeting that at that time there was a very strong feeling respecting deep draining; and when the Royal Agricultural Society held its show at Shrewsbury, the plans of Mr. Smith, of Deaneaton, and of Mr. Josiah Parkes were discussed. The system of the latter gentleman was generally adopted, because it was more in consonance with the feeling of those interested in draining, and it was adopted by the Enclosure Commissioners, who, however, soon found that it was wrong, and for the last twenty years the Commissioners had not been tied by any such rules. The inspectors were men who thoroughly understood their business. All that a farmer had got to do was to show them how he proposed to drain the land, and they were generally willing to agree upon the system to be adopted. The natural way to drain land was where there was the greatest fall. He did not approve of draining across the land; he had always found it better to drain up and down the furrows. Very often a great mistake was made in attempting to make the land level when the drains had been made. With regard to the ridges, they should not be thrown down.

Mr. HOWARD asked if Mr. Trethewy actually meant to say that they should not be thrown down?

Mr. TRETHEWY replied that they should not be thrown down all at once. Another mistake which had been made in draining was that the drains had been made too long, without sufficient head-drains. It should be borne in mind that they wanted air as well as water in drains. He did not subscribe to the idea that by draining the land the water made its way sooner to the rivers. What had to do most with the velocity of the water and the rate at which it got into the rivers was the way in which the arterial drains were kept. It was a great mistake to fill up ditches. With regard to laying down the land to grass, that was a question which must depend very

much on circumstances. He thought that the land in some parts of the Midland districts was not adapted to it, and that it was more adapted to the growth of cereals than to the growing of grass.

Mr. C. S. READ, M.P., said—I think it was Mr. Smythies who remarked that they wanted to have experience—the results of experience—in various parts of England. Now, Norfolk is a dry county, and the soil is generally light; but we have what is called heavy land, though I do not suppose it is quite of the nature that has been so graphically described. I have had some experience with regard to heavy land in the Midland Counties and elsewhere, but not, I am happy to say, at my own expense. As to anybody taking in these days heavy land which is thoroughly out of condition, I would say to him what *Punch* once said in giving advice to people who were thinking about being married, "Don't." (Laughter). Mr. Bowick said that heavy land had a great deal of fertility, and could not be exhausted. If it cannot be exhausted it can very speedily be choked, the fertility of heavy land being often destroyed by an abundance of weeds and rubbish. The introducer of the subject said that you should steam-plough heavy land directly after harvest, to prepare it for mangels, in the spring, or you may at once sow vetches in the autumn. My experience of heavy land is that if you take it thoroughly out of condition, you must give it two years' fallow—a rough one to kill the roots, weeds, and a fine one to kill the animals. During the last four years the land has been so wet that you could not get a fallow at all, and the consequence is that the heavy land of England is now in a worse state than it has been for many years. There is land which was laid down to grass some years ago, and the grass appears to be a very long time coming. We have to spend a great deal of time and patience before we can get seed in the first instance, and we have the greatest possible difficulty in certain seasons in getting strong plants of natural grasses. I have tried to lay down heavy land to grass, with and without a corn crop, and often I have not succeeded. A large portion of the heavy land of Suffolk was in grass previous to the great French war, and it was applied to the growth of wheat in consequence of the high price to which grain rose; and now that wheat has become so cheap it seems to me to be a natural consequence that that land should be laid down to grass again. I find that some patriotic individuals still exist who think that farmers ought to grow wheat for the benefit of the community; but, gentlemen, in my opinion, the first question for us to consider is how farmers are to live, which, with present prices, is a very difficult problem. (Hear, hear). As regards drainage, I entirely agree with what fell from Mr. Street. I disagree with what Mr. Smythies said about deep drainage being necessary on heavy lands. Nor can I concur with him in his wish to excuse the course pursued by the Government in reference to that matter by saying that they had experience before them in favour of adhering to 4 feet. The matter was, in fact, not one of experience, but one of theory. Mr. Parkes, the great drainer of the day, who tried to upset the system of Mr. Smith, with whom almost every practical man agreed on the subject, went for 4 feet drainage, with his pencil-cases, or 1-inch pipes, but that system had to be abandoned. It is impossible to have deep drainage successful on stiff clay if the drains are at wide intervals. You must have frequent drains on heavy land. Independently of the question of cost, 3 feet are preferable to 4 feet. There is a vast difference between heavy land and land of a springy nature. What I mean by heavy land is a stiff clay, which, the deeper you go down into, the heavier and dryer it seems to become. This brings me to the question whether or not draining of heavy lands really increases the amount of water which flows down to lands at a lower level. I really don't believe it does. When the land is drained the rain has to percolate through 3 feet of soil, and the soil is more capable of retaining water than it was before, and therefore, as to the drainage of heavy land, increasing floods. I don't believe it a bit. The tapping of springs and the drainage of mow land may increase floods, but I don't believe the drainage of heavy lands increases it at all. I differ entirely, having had some experience on the subject, from what Mr. Street said about putting heavy lands on the flat. I have tried it to my cost. During the last three or four years I have lost a considerable amount of money, and hence I made up my mind to go back to the old system of ridges—what we call the farrow work in Norfolk

and what was mentioned by Mr. Coussemaker in his remarks on this subject. One word as to steam cultivation. It was thought at one time that that was going to work miracles with regard to heavy land. I have done a great deal of steam cultivation myself, and I have not been remunerated for it. I think Mr. Smythies said that if you plough deep you will bring up the treasures of the soil. If you bring up the treasures of the soil you will also bring up the barren subsoil, with all sorts of rubbish, charack, and other weeds. By all means let there be deep cultivation, but on no account plough deeply.

The Rev. E. SMYTHIES observed that he had not said one word about bringing the subsoil to the surface.

Mr. READ continued:—Cultivate, I say, as deeply as you like, but on no account bring up even a small portion of the dead soil. Before sitting down let me say one thing about the rotation of crops, namely, that I think that on heavy land we ought to be left at liberty to cultivate as we please. I fully believe that clay land has a great deal of unexhausted fertility; but the worst of it is that you have such difficulty in extracting the fertility. (Hear, hear.) I find, with regard to the growing of barley on heavy land, that you can carry it on for a great number of years at an expense of about 80s. an acre upon artificial manures, and at the end of the time—I have this from a practical and experienced chemist—the land will be in just as good order as regards fertility as it was at first. Therefore, I say that the general rotation of crops which is insisted upon in the cultivation of heavy land is altogether a mistake, and in such days as these it certainly ought to be abolished. (Hear, hear.) I have done all I can to get roots upon heavy land, but often without success. (Hear, hear.) I should only attempt a few mangels and grow green crops in the rear of the fallows, and then the land will be ready for a corn crop in the autumn or spring.

Mr. James HOWARD (Bedford) said Mr. Trethewy was a man who had such wide experience in agricultural matters that it was very rarely that he ventured to differ from him on these topics, but on two points he had expressed an opinion that, notwithstanding the respect entertained for his opinions generally, he must offer a few words of dissent. Mr. Trethewy had intimated, if he did not enunciate, an opinion against the throwing down of the high back lands which were found throughout the Midland Counties. Now, what was the fact, if they dug down two feet below the ridges they would find nothing but what appeared raw clay. The clay was not, however, in its normal or primitive condition, but in a condition to which it had been brought by ridging up and the treading of horses for a long period, as well as the want of exposure to the atmosphere; generations ago it was the surface soil, and it had been trodden down with great injury to the land. He had on his farm some 200 acres of land which he could remember in high ridges, which was now as flat as the table before him, and no one could tell from the look of the crop or the condition of the surface where the ridge or furrow had been formerly, but then the land had been worked down gradually. These ridges had been thrown up into their present form, and could be thrown down again, without injury, if done judiciously. As to the question of draining which had formed so prominent a feature in the discussion, he had drained some 600 acres upon his own estate of boulder clay in a variety of ways, and he did not think heavy land could be drained too deeply. On the other hand, he did not believe draining to a depth of four feet to four feet six inches was at all necessary, and he had found that which had been drained three feet to three feet six inches deep was just as dry as land which had been drained deeper. They had lately had some very wet winters, and he could endorse the view which had been expressed, that increased depth did not compensate for increased width. Fifty acres of his land had been drained four feet deep and eleven yards apart, but intermediate drains had been put in since. The putting up land in very narrow ridges, which had been advocated by Mr. Coussemaker and Mr. Read, was totally opposed to his experience; and he had a great deal of hilly land, the rise of which was 1 foot in 7, and 1 foot in 8, and, as Mr. Read well knew, the soil was particularly strong and tenacious. He never had an open furrow or a water gutter upon his farm; it was broken up with a steam cultivator and laid perfectly flat. Some years ago, in reading a paper before the Bedfordshire Agricultural Society, he challenged his neighbours, by whom he was

surrounded, to say whether they had ever seen a drop of water standing on a field belonging to him, and they admitted that they had not. He thought that putting land up in small ridges was injurious. The fine particles of the soil got a great deal more washed away than when on the flat. He held that water should go down where it fell. What was the practical result of having small ridges? A large quantity of water ran down by the furrows to the lower parts of the field and there a hundredfold more water had to be absorbed or taken off than there otherwise would be. Then, again, if you put upon land narrow ridges you get a vast amount of tail corn on the sides of the furrows. He quite endorsed what had been said about growing on heavy land as much green food as you could for summer consumption. The meat produced on heavy land should be principally got rid of before winter. He did not think Mr. Lawes could have meant exactly what had been attributed to him with reference to straw by one speaker. Mr. Lawes meant manurial value only, but as they had Dr. Voelcker present perhaps he would be good enough to throw some light on that matter. From very long experience he could endorse what fell from Mr. Read as to the impolicy of deep *ploughing* heavy land by steam. It was, in fact, an entire mistake. The best plan was to break it up with the steam cultivator and leave the subsoil where you found it.

Mr. H. NELLE (Worley, Manchester) said the subject of the paper had merged very much in the question of drainage, the importance of which no one could dispute. He rather regretted that Mr. Street did not go further into the cultivation of other crops besides barley. He was very much impressed by what Mr. Read said about drainage upon heavy land and upon light land. On his own land, the bulk of which was light, he had drained 5 feet down, with 6 or 7 feet of outfall. The land was laid down on the flat, and so far as his experience went the experiment had answered very well. The cultivation of heavy land for root crops was exceedingly precarious; in fact so uncertain that he thought it best to avoid it. They must all feel much obliged to Mr. Street for the very excellent advice that he had given them—advice that was especially useful to young farmers, but the gist of the discussion was how heavy land could be so farmed as to be made to pay. (Hear, hear.) More capital must be entered into English farming, or it must be abandoned, and that involved the question how security was to be obtained for unexhausted improvements. There was one suggestion that he wished to make before sitting down, and he must say that it appeared to him very important. As there was about to be such an extensive and remarkable agricultural exhibition in the neighbourhood of London, he hoped that the Club would open its doors to many of those who would be assembled, and would invite a general meeting of farmers coming from all parts of England to confer together on the position of agricultural affairs.

Dr. VOELCKER (Salisbury Square) said: As regarded straw it had been said that Mr. Lawes attached very little value to its mineral properties. He believed that was the case; but straw was a vehicle for conveying the liquid and solid excreta of stock to the land, and that was no doubt the reason why the sale of straw on most farms was not permitted. He thought it desirable that tenants should be at liberty to sell the straw, provided they brought good artificial manures and feeding substances on the land; but if agents or proprietors were to grant that liberty the result would be that the price of straw would immediately drop down, and the inducement to sell it be proportionately diminished. With regard to the remarks of Mr. Trethewy and Mr. Read in reference to drainage-water, he would observe that Mr. Lawes some years ago had very kindly placed at his disposal the drainage of a field which for the last 25 years had been continuously under cultivation for wheat, one of the experimental plots, and had been manured with farmyard manure, and the constant addition from year to year of a good dressing of that kind of manure had made that portion of the field much more porous than the plots manured with artificial manures. The result was that in the course of two years only twice, sufficient drainage-water for analysis passed through the more porous plots manured with dung, whilst from the other plots he obtained more than a sufficient quantity of drainage water on eight or ten occasions. As drainage unquestionably increased the porosity of the land, they had here a direct proof that less water passes from the more porous drained, than from undrained land. One remark with regard to steam-cultivation. Some people seemed to think that steam-cultivation could be put into practice at all

times of the year, but he had repeatedly pointed out at agricultural gatherings, that harm was done by steam-cultivation when the land was soaked with water. He had seen a great deal of injury done to land by the use of the steam-plough at improper times, when the land was dry. The best plan was to use the steam-plough as soon as possible after the crop had been gathered in. The farmer had then the full advantage to be derived from steam-cultivation.

Mr. J. W. WATTS (Mauor House, Little Harrowden, Wel-lingborough) said as far as he could judge, no one had told him how to get a living on sold land. (Laughter). Various suggestions had been made with regard to drainage, ploughing, and so on, but he wanted to know how to cultivate cold land at a profit. A neighbour of his, who was a celebrated breeder of entire horses, about that time of the year in 1877, ploughed up some heavy clay land with horses, and he went down to the moderate depth of four or five inches. After that, about the end of June, a steam cultivator was used, and it went down eight or nine inches without bringing any of the clay subsoil to the top. After that the same piece of land had about fifteen tons of good rotted manure. In October the land was ploughed with horses, and there was a very good tilth. The result was a barley crop of three quarters per acre, producing something like £5, the land being let about 35s. per acre. Upon the crop of barley rested two years' rent, rates, and taxes, and the total cost, including manuring and harvesting, could not have been less than £10 an acre; so that there was a clear loss of £5 per acre. How was it possible to continue farming under such a state of things as that?

Mr. STREET, in replying, said one speaker had wished he had dwelt more on the different systems of cropping. In his paper, he (Mr. Street) had said, "I have perfect freedom to crop and farm as I think best, consistently with good husbandry. I trust the day is not far distant when all my brother farmers can say the same." On that point, he thought, it was impossible to lay down any distinct rule; the matter should be left entirely for each individual to decide for him self, according to circumstances. One conclusion of Mr. Read's, with regard to his paper arose from an error of the printer. In his paper he said, "In taking a farm wet and out of condition the best way is to drain and dead fallow the whole." Then there was a new sentence, beginning, "Immediately after harvest," &c. As the paper was printed the word "immediately" joined part of the first sentence, and hence the misunderstanding (Hear, hear). He was very glad that every speaker, with one exception, was in favour of an alteration of the system of drainage. As this was the first evening since its formation, the Club had given to heavy land, if alteration did take place, the evening would not have been spent in vain.

On the motion of Mr. T. DUCKHAM, seconded by Mr. J. WOOD, a vote of thanks was given to Mr. Street for his paper.

## Chambers of Agriculture.

### CENTRAL.

The monthly meeting of the Council took place at the rooms of the Society of Arts on May 6th, the Marquis of Huntly in the chair.

After some preliminary business relating to finances, a Report from the Business Committee was read which recommended that no meeting of the Council should be held in June, and that arrangements should be made for holding an aggregate meeting of the Central and Provincial Chambers and other agricultural bodies on the third day of the Show of the Royal Agricultural Society in July.

Mr. J. BELL having moved the adoption of this Report, Mr. H. NEILD having seconded it,

Mr. DUCKHAM suggested that a Committee should be appointed to meet a Committee of the Central Farmers' Club and make with it the necessary arrangements for the meeting.

Mr. PELL, M.P., remarked that that was not necessary, as the Business Committee had already resolved to communicate with the Committee of the Club on the subject.

After some discussion the Report was adopted; and it was also decided that the June meeting of the Council should be

held on the 10th of that month, and further, that the Business Committee should be requested to communicate with the Provincial and Associated Chambers for the purpose of making arrangements for the holding of a general meeting of agriculturists in London during the Show of the Royal Agricultural Society.

Colonel RUGGLES BRICE (Vice-Chairman of the Chamber), presented the following Report on Corn Returns from the Weights and Measures Committee:—

"The Weights and Measures Committee, in compliance with the desire of the Council on the 4th February last, have had under their consideration the question of the mode of collecting the 'Corn Returns,' on which the official *Gazette* averages of the prices of corn are based. In reply to their Chairman, the Secretary to the Board of Trade intimated in the House of Commons the readiness of the Government to receive and consider suggestions for improvements in the system now employed. Your Committee accordingly placed themselves in communication with the Board of Trade, and have been endeavouring to collect the necessary information to enable them to make such suggestions as seemed desirable. They are not yet in a position to make definite recommendations, but would be greatly assisted if local Chambers of Agriculture would undertake to have the matter inquired into in their several districts, and would formulate such schemes for the amendment of the system as seem to them practicable and suited to their localities. With this view they would ask the Council for authority to draw up and transmit to the various associated Chambers a series of questions touching chiefly on the following points:—(1) The increased prices returned owing to the use of weighed measures, which are in excess of the natural weight of the grain, and the failure of the local collectors to convert the quantities sold into true imperial measures before making the returns. (2) The enhanced prices of the *Gazette* averages resulting from more corn than was formerly used being now consumed on the farm in the feeding of stock and not brought to market. (3) The increased values of the corn returned due to the additional price following on repeated sales, so that the prices quoted often include the cost of carriage and the profits of corn dealers. Your Committee observe that the Secretary of the Board of Trade in replying to a question put by the Vice-Chairman of the Central Chamber with reference to the change made after 1864, whereby the number of market towns from which returns are sent was reduced from 290 to 150, and injustice thereby inflicted on the tithe payer, has stated that very little difference was made by the alteration, and that, 'if anything, the prices of the 150 towns were lower than the prices of the 290 towns,' while the Government had no reason to believe that the prices would have been lower had they continued to have been taken from the larger number of centres. This reply does not seem satisfactory to your Committee. They incline to the belief that the cessation of reports from the smaller markets must to some extent have deprived the returns of data resulting from sales at the primary markets, which they cannot but think, if accurately registered, must have stood at lower figures than those prevailing at central markets. The official statements of the aggregate sales on which the corn averages are framed show so material a diminution in recent years, that your Committee would direct attention to the subjoined figures, as indicating the increasingly reduced area from which the data are now drawn, and the inadequacy thus revealed of the system in force to ascertain prices even with approximate accuracy.

QUANTITIES OF BRITISH CORN RETURNED AS SOLD IN MARKET-TOWNS IN ENGLAND AND WALES.

Year.	Wheat.	Barley.	Oats.	Towns.
	Qrs.	Qrs.	Qrs.	
1864	4,992,300	2,599,316	508,748	290
1870	3,398,655	1,841,878	306,091	150
1877	1,942,688	1,795,049	176,092	150

Colonel BRICE in moving the adoption of this Report complained of the unsatisfactory reply which had been given to his question in the House of Commons by the President of



the Board of Trade (Lord Sandon), with respect to the number of pounds upon which the Imperial Return Averages were taken. The conclusion to which he came from that reply was, he said, that the noble lord could not have made such a careful inquiry as the matter required. From the information which he (Colonel Brise) had obtained, and the statistics which had been placed before him he believed that the diminution in the number of towns from which the corn averages were taken from, 290 to 150, had been very detrimental to the interests of those who had to make any payments based upon corn averages. There could be no doubt that in the smaller towns from which corn averages were taken many inferior samples were offered at market, and that as a natural consequence the returns given were less than they ought to be. He was surprised, therefore, at the answer which he had received from the President of the Board of Trade. He could only add that the Committee were in communication with his lordship, who had assured them that the subject should have the consideration it deserved.

Mr. CALDECOTT, in seconding the motion, observed that from his own knowledge he could state that several towns left in the reduced list had ceased to be influential corn markets, whilst many were omitted which had risen to importance. He suggested, therefore, that to the three queries contained in the Report a fourth should be added in these words:—"What towns in their respective localities they would recommend to be made returning markets."

Mr. JAMES TURNER would like to know whether sales of foreign corn were included in the returns made by the scheduled towns. He knew that they ought not to be, but it was an important question whether in the case of re-sales of foreign corn the merchant included them in the returns he made to the Government or not.

Mr. CALDECOTT and Mr. NEILD both remarked that they did.

Mr. TURNER was aware that foreign wheat had during the last two or three years exceeded the English wheat in value to a very considerable extent, and if the prices were placed in the same category with those of English corn in the same market, that must have the effect of materially raising the averages on which tenants of corn-rented farms made their payments. Further, the merchant was not the proper person to make the returns in many towns. If the titheowner or the owner of the property were to take his rent in kind, a portion of that corn would go in payment of the sum due to him instead of the money payment for which it was commuted; and, speaking roughly, there was as much as from 10s. to 20s. a quarter difference between the price of tail and that of head barley. Tail barley was consumed at home, and did not come into competition, and if the titheowner or the landowner had to take his rent in kind he would have to accept a portion of that.

Capt. CRAIGIE (Secretary) observed that the returns were not quite so fair as they could be made in the case of British corn, and that mistakes might be occasionally committed, but he believed that every care was taken to confine the returns to British corn.

The Report of the Committee, with the insertion of the query suggested by Mr. Caldecott, was then agreed to.

The next question being the consideration of the County Boards Bill,

Mr. BRAMSTON GURDON (Norfolk) moved the following:—"That this Council, though as strongly as ever in favour of a comprehensive measure for the establishment of county boards, does not consider the Bill at present before Parliament worthy of support." He said he happened to be one of the few chairmen of quarter sessions who were really favourable to the passing of a good and comprehensive Bill, but he was not in favour of such a Bill as that now before Parliament, which was intended as a "sop" to the occupier, and gave him a pretence of power and none in reality. The Bill of which he should approve would combine the best men at the quarter sessions and the best representatives of the occupiers, and in that way constitute a strong body—strong because elected, not nominated—strong in the support of the constituency behind it, and strong in the sense of its own impartiality. He believed it was possible to have a Bill of that kind, but the present measure was one of a totally different description, and if he had the choice between it and no Bill at all he would have no Bill at all (cheers). At the same time it struck him that there was now a favourable opportunity of passing a good Bill, and

that any future Government would not have so favourable an opportunity for doing that. The minds of the ratepayers and the minds of the magistrates had for some time been directed to the subject, and he knew that a large number of both classes were anxious to see a fair and reasonable and not an extreme measure passed (Hear, hear). Let them, therefore, have such a Bill now if they could; but as to the present Bill, he would strike out the whole of it after the clause constituting the board. He objected to the division into wards, but as quarter sessions would have to form them no doubt they would make the wards continuous with the area of the Unions. Farther, he did not approve of the voting paper, and thought it would be simpler and better if the boards of guardians were at convenient times to call a special meeting, and there and then elect those members of their body whom they wished to represent them (Hear, hear).

Mr. NEILD having seconded the motion,

Mr. VERN WRIGHT moved, by way of amendment:—"That should a county board be established, constituted according to the Bill before us, it ought to take the place of quarter sessions in all matters except police and justice."

Col. BRISSE seconded this proposal.

Mr. W. B. SNELL entirely agreed with Mr. Gardon. A meeting of his Chamber (the Devon and Cornwall) was held the week before, and after a long discussion a resolution was unanimously adopted condemning the Bill of the Government. The main objection to the measure was that it did not give the ratepayers a voice in the expenditure of the county funds. In the extreme west of England that subject had been under consideration for more than twenty years. The lower classes in towns were being educated, and had had the parliamentary franchise conferred upon them, and the ratepayers of the county, who now elected their boards of guardians, highway boards, and other bodies, demanded to have a further share in county government and in the expenditure of county funds. The pick of the magistrates and the best business men of the county would form a much stronger board for the management of county affairs than one consisting entirely of justices of the peace. He objected to their having two houses—an upper house and a lower house—the one consisting solely of justices of the peace, and the other of ratepayers and justices combined. The powers of the latter body would be nil. All the principal powers of local government and of the purse would be in the hands of the upper house, the justices, and the lower house would virtually have none at all. For instance, if the new board were to discuss the question of re-arranging the highway districts of the county, they would have to submit any proposals on the subject in writing to the upper house, who might, if they chose, throw them into the waste-paper basket. He strongly disapproved of a Bill which assigned to the representatives of the ratepayers only the duty of collecting money for others to spend (cheers).

Mr. CARRINGTON SMITH considered the Bill so bad as to be incapable of amendment, and speaking in the name of his Chamber, said he had come there to give it a kick (Laughter).

Mr. JAMES HOWARD thought the Council would best consult its dignity by refusing to waste its time in discussing the Bill. The President of the Local Government Board knew very well what were their views as to the requirements of the ratepayers in respect of a County Board Bill, and, seeing that the right hon. gentleman had ignored these views and the views of every agricultural society that had expressed an opinion on the subject, he must repeat that it would ill become the dignity and self-respect of the Council to waste further time upon the consideration of such a miserable bantling (Cheers and loud cries of "Vote").

Mr. HICKS, M.P., concurred in the amendment. He firmly believed that if the Bill were carefully examined, it would be seen that it assigned to the new board all matters connected with county government, excepting the police and the administration of criminal justice (No, no). Well, that was his opinion. The Bill left little, he contended, to the magistrates besides the repair of the buildings in which they held their sittings, and the payment of their clerks and other officers.

Mr. C. S. READ, M.P., was glad to find that there was at least one gentleman present to speak in defence of the Bill; and although it was but a feeble defence he believed it to be the best that could be made of it (Laughter). For his part, he thought that if this were the best Bill that Parliament



could give them, they had better fall back upon the recommendation of the committee of two years ago and let the delegates of the ratepayers take their place with the magistrates in quarter sessions, and that the committees which did the chief part of the county work should be constituted half of justices and half of elected ratepayers. That would certainly do better for a time than a Bill of the sort they were now discussing; for it that were passed into an Act all they would get from their exertions was increased expenditure, the creation of a dual authority, an upset of everybody and the pleasing of nobody. In short, if this were the best Bill the Government could give them they had better have no legislation at all, but turn their attention to something that was practicable and useful, and see if another Government would not in time be found to settle the question in a satisfactory manner.

Colonel BRIZE was strongly in favour of the passing of a complete measure of county administrative reform, but did not see how it was to be got if everybody opposed that Bill because he did not approve of its details. If they did not get a Bill passed that year, it would, he thought, be a long time before a Bill was passed. With a general election pending, it would be impossible for the Government to propose a Bill of that kind next year, and if there were a change of Government he did not believe the gentlemen now sitting on the Opposition benches would be able to carry a Bill of that description in as satisfactory a shape as those now in office could. The Bill of last year might have been made an excellent measure if the amendment for substituting the union for the petty sessional area and a few amendments suggested by Mr. Read had been adopted, and he should like to have seen it reintroduced this year. Unfortunately Lord R. Churchill made a bitter speech against it, and so frightened the Government that they dropped it; but in his opinion they were wrong in giving it up, the views enunciated by his lordship not being, he believed, those of the country at large, or even of the principal landowners and magistrates. They were, in his opinion, only the views of a small class of magistrates, consisting chiefly of clergymen and other persons of little influence in the counties, while the magistrates and landed proprietors as a body desired to have the larger and more influential occupiers associated with them in the management of county affairs.

The CHAIRMAN cordially supported Mr. Gurdon's resolution and expressed his concurrence in every word that had fallen from Mr. Read. Resolutions had been sent up from seventeen local Chambers, all of them condemning the Bill as it stood, and this Chamber would be completely stultifying itself if it rejected the resolution and adopted an amendment which certainly implied approval of the Bill. If this were the only County Boards Bill the Government could offer them they had better remain as they were; but he could assure them that there were plenty of members of the Liberal party who were willing to settle the question, and anxious to see the representatives of the ratepayers taking a large if not an equal share with the magistrates in the conduct of county business (Hear, hear). It was once said by Mr. Bright that the ministers who could carry a County Government Bill that secured a proper representation of the ratepayers would confer the greatest possible benefit on the counties; and in that sentiment he (Lord Huntley) cordially agreed; but it was his humble opinion that this Bill would never accomplish that object, and that it could not be made a measure which the Chamber should even desire to amend (Hear, hear).

On the question being put from the chair, the amendment of Mr. Wright was rejected by a very large majority, whereupon the resolution of Mr. Gurdon was carried amid loud cheers with only one dissenter.

The next matter on the agenda being "The Incidence of Local Taxation,"

Mr. WALKER, of the Nottinghamshire Chamber, read a paper, in which he maintained that the unjust placing on one description of property, the land, a disproportionate amount of the public burdens, whilst income arising from personal property was in a great measure exempt from such charges, was the main cause of the present depression of agriculture. Other nations, he observed, had not followed us in our free trade policy, and he contended that if free trade was still to be the rule indirect taxes ought to be imposed upon the fully-manufactured article, so as to leave production free, and all

direct taxes obtained by means of a fairly-adjusted income-tax, ranging from the artisan upwards throughout the community. In conclusion he moved:—

"That as what are called Local Taxes (except those which are co-operative, such as light and water) are necessary for the good of all, they should be placed on the individual according to his ability to pay, and not on particular kinds of wealth from which that income is derived, and which allows many to escape, taxing the few for the good of the many. That therefore no area of valuation will be acceptable which allows any one to escape payment of these so-called local burdens on the plea of exemption of any kind of wealth which is income producing, and where the receiver is able to pay."

Mr. VERE WRIGHT seconded the motion.

After a long and rather desultory discussion,

Mr. DUDDING (Lincolnshire Chamber) moved, as an amendment:—

"That property and income of every description, real and personal, should be taken as the basis of, and assessed for local rates."

Mr. D. LONG having seconded the amendment,

The CHAIRMAN pointed out the difficulty of ascertaining where the income was to be found to contribute towards local rates, and suggested that a resolution in the following terms might convey what seemed to be the wish of the Council:—  
"That income and property of all descriptions should contribute towards the maintenance of all imperial burdens, many of which are now mainly provided for out of the local rates, and that full inquiry should be instituted by the Government into the subject."

Mr. GARDNER said he would be happy to propose that at the proper time.

Captain CRAIGIE observed that the Chamber had frequently passed resolutions on the subject, and that the difficulty mentioned by the Chairman was one that always had faced them and still did so.

After a discussion, in which Mr. Jasper, Mr. More, Mr. Stoner, M.P., Mr. Jabez Turner, Mr. Whitaker-Wilson, Mr. Mansfield, Mr. H. B. Powell, Mr. Bell, and others took part, the amendment of Mr. Dudding was withdrawn, and Mr. Walker afterwards consented to withdraw his motion in favour of one proposed by the Chairman and seconded by Mr. Mason, which was as follows: "That income and property of all descriptions should contribute equally towards the maintenance of all burdens which are of common interest, many of which are now mainly provided for out of local rates, and that full inquiry should be instituted by the Government into the subject."

This proposal on being put was agreed to unanimously, and the proceedings terminated with a vote of thanks to the Marquis of Huntly as the chairman.

## SMITHFIELD CLUB.

The Special Committee appointed to take evidence, consider, and report to the Council, on the subject of giving encouragement to early maturity in animals, and to consider the prize sheet generally for the year 1880, held a meeting at the Agricultural Hall, on Monday, May 5th. Present:—Mr. Jacob Wilson in the chair; Col. Kingscote, C.B., M.P. (president), Mr. Charles Howard (trustee), Messrs. Thomas Brown, Richard Stratton, Walter Farthing, John Treadwell, T. W. Garrett Taylor, Edward Pattison, Henry Webb, and Sir Brandreth Gibbs (vice-president and hon. sec.).

The Hon. Sec. reported that a circular had been sent all the members of the Club, informing them of the day, hour, and object of the meeting, and asking those wishing to appear before the committee to send in their names, also stating that written communications on the subject under consideration would be printed for the use of the committee.

The Committee proceeded to take evidence of the members and others who were in attendance, and to carefully consider the communications which had been received.

During a lengthened sitting considerable progress was made, and the Committee adjourned to Thursday, June 5th, when they will continue the preparation of the report to be laid before the Council of the Club.

## THE FARM ANIMALS OF THE UNITED STATES.

Mr. J. R. Dodge has contributed the following valuable article to the *Chicago Farmers' Review*. It contains so much information about the numbers and values of American live stock, just now subjects of peculiar interest here, that we give the article entire:—

The state of agriculture in any country is indicated by the numbers and condition of farm animals. The pastoral interest is the first that engages attention in the settlement of primitive areas; the breeding and fattening of domestic animals command the skill and capital of the most advanced agriculture. It is found that sheep are profitable on the plains of Texas and in the parks of Colorado, where the price of lands per acre is counted in cents. They also constitute the "sheet-anchor of British farming," with lands worth hundreds of dollars per acre. It is a mistake to assume that high-priced lands are not available for meat production; on the contrary, it is difficult, if not impossible, to maintain a profit-making fertility without farm stock.

France yields little more than half the production of the United Kingdom of Great Britain and Ireland, acre for acre. The reason is found in meat production—grass and turnips against grain. The former has an area of 204,031 English square miles, the latter 121,305; and yet the smaller area produces 50 per cent. more meat than the larger. One supplies the meat for 36,000,000 people, but they eat only 51 lb. each per annum; the other on its circumscribed area provides four-fifths of the meat supply of a population nearly as large, requiring twice the meat supply *per capita* consumed by their French neighbours. France has 15 per cent. of her agricultural area in natural prairies and pasturage, and 34.7 per cent. in cereals and farinaceous plants; Great Britain, reversing the proportion, has 27.9 and 21.3 per cent. In artificial meadows and forage plants France has 6 per cent. and Great Britain 15.9. The result necessarily is a rate of yield thus stated by the international statistical commission as an average:—

	France.	Great Britain.
Wheat .....	17.1 .....	29.9
Barley .....	20.8 .....	39.0
Oats .....	25.4 .....	45.9
Potatoes .....	128.4 .....	164.4

We find the same principle ruling in the agriculture of all the Old World countries. In new countries having abundant natural pasturage, farm animals are numerous before soil culture is known. This country has necessarily a large pastoral industry upon broad and free wild areas, which is assumed to compete with animal production upon farms, and which tends temporarily to repress improvement in domestic animals in the older states. Large numbers of domestic animals may, under such circumstances, exist in connection with a low state of agriculture, having, in fact, no connection with arable culture or crop rotation. Before examining the stock interests of the United States in detail, let us make a comparison with those of other countries.

The population of Europe is about six times that of the United States, and the farm animals of Europe and the United States may be thus compared, the figures for Europe being those of the international statistical commission:—

	Europe.	United States.
Horses .....	31,573,663 .....	10,350,000
Mules .....	4,136,031 .....	1,850,000
Cattle .....	89,678,248 .....	32,000,000
Sheep .....	194,026,236 .....	37,000,000
Swine .....	42,686,492 .....	33,000,000

In brief, this country possesses four-fifths as many hogs, more than one-third as many cattle, one-third as many horses and mules, and only about one-fifth as many sheep as the countries of Europe combined.

The more prominent of the European States are thus represented in food-producing animals:—

	Cattle.	Sheep.	Swine.
Great Britain .....	6,002,100 .....	20,495,900 .....	2,519,300
Ireland .....	4,142,400 .....	4,482,000 .....	1,022,241
Russia .....	22,770,000 .....	44,432,000 .....	9,800,000
Germany .....	14,386,791 .....	22,205,682 .....	6,340,415
Austria .....	7,425,212 .....	5,026,398 .....	2,551,473
Hungary .....	5,279,193 .....	15,076,997 .....	4,443,279
France .....	11,721,459 .....	25,085,114 .....	5,755,656
Italy .....	3,489,125 .....	6,984,049 .....	1,553,582
Spain .....	2,967,303 .....	22,468,969 .....	4,351,736

In the proportions of the different classes, Russia stands first in horses, having 167 to each 1,000 farm animals (including goats); Belgium, Sweden, and Denmark following next in order. Spain has 61 mules and 18 horses to 1,000 animals. Italy has 49 mules and Portugal 36—the principal mule-using countries. Bavaria (in Germany) has the largest proportion of cattle, 527 to 1,000 of all kinds; Wurtemberg, 491; Saxony, 469; Switzerland, 417; and Sweden, 449; while Great Britain has but 150. Great Britain occupies the first place with sheep, 735 to 1,000; Spain, 602; Roumania, 596; Hungary, 546; Switzerland, 546; Norway, 533; France, 525; and Portugal, 520. More than half of the farm animals are sheep, 511 to 1,000. Comparing with the United States, we find the following proportions, omitting goats—horses, 91; mules, 14; cattle, 281; sheep, 325; swine, 289. These proportions are all larger than those for Europe, taken as a whole, in all animals excepting sheep.

The comparison in proportion to population (the number of each kind to 100 inhabitants) is as follows:—

	Horses.	Mules.	Cattle.	Sheep.	Swine.	Goats
Europe .....	11.2 .....	1.5 .....	31.8 .....	68.7 .....	15.1 .....	6
U. S. ....	21.5 .....	3.4 .....	66.6 .....	77.1 .....	68.7 .....	—

This country has 238 domestic animals to 100 people, nearly double the European supply, and more than double in respect to its more important element, that of the bovine race.

### PRICES AND VALUES.

Having thus in large measure the basis of profit and progress in general agriculture, if we use aright our opportunities we should discriminate wisely between pastoral and mixed husbandry, and learn how animals can aid in swelling the garner and filling the coffers of progressive husbandmen. The rapid increase in aggregate amount of this wealth is indicated by the following figures, those for 1870 being unnaturally swollen by the high valuations of that period:—

	Dollars.		Dollars.
1850.....	544,180,516	1870.....	1,525,276,457
1860.....	1,089,239,915	1878.....	1,574,620,783

Of this aggregate, cattle represent 40 per cent.; horses, 38; hogs, 10; mules, 7; and sheep, 5. This annual production, however, is by no means limited to these proportions, as swine and sheep mature for all profitable uses in a year, while cattle require three years, and horses and mules five, the average life of both cattle and horses being still greater.

The average prices of farm animals in States representing distinct belts and sections are indicative of various and diverse conditions of agriculture and degrees of improvement of breeds, of care and treatment.

The estimated averages for 1873 are:—

	Horses.	Mules.	Cows.	Other	Cattle.	Sheep.	Swine.
	Dols.	Dols.	Dols.	Dols.	Dols.	Dols.	Dols.
Massachusetts .....	87.46	—	40.67	37.25	3.60	13.86	—
New York .....	80.77	88.14	32.32	28.30	3.30	8.36	—
Maryland .....	68.55	88.47	30.39	22.08	3.65	5.62	—
Georgia .....	70.77	78.81	16.00	8.90	1.57	3.29	—
Texas .....	27.45	44.67	14.75	10.30	2.09	3.67	—
Tennessee .....	52.91	56.81	18.86	10.61	1.92	4.06	—
Illinois .....	54.84	63.44	27.77	21.97	2.48	5.89	—
Kansas .....	51.34	65.35	23.68	19.14	2.31	5.96	—
California .....	40.94	68.98	28.23	17.23	1.52	6.27	—

Horses are high in the East, higher in Georgia than in the Western States that have a surplus for cotton districts, and lower in Tennessee than in Illinois, because of a small surplus and somewhat inferior quality. The low average of Texas is largely caused by an undue proportion of inferior stock. The difference in cows is due more to quantity than locality, milk

products having everywhere active local demand, and the surplus relatively cheap transportation. The principal difference in sheep values results mainly from breed and quality. Distance from market and time and care required in maturing, affect more positively the value of cattle, other than milch cows.

The depreciation in values of the past few years has evidently reached bottom, and the tendency of demand is now toward steadiness and ultimate advance.

#### INCREASING DEMAND FOR BEEF.

There is an increasing demand in this country for beef of a better quality. Our population now receives annually an increment of more than one million. Ten years ago the British people consumed but about two ounces of meat each daily, now fully twice as much. Then only one-ninth of the supply was obtained abroad; now one-fifth, with increase of grass area and curtailment of breadth of cereals. In the export year 1877, our foreign shipments of fresh beef were 49,210,990 pounds, at 4,552,523 dols., or 9.27 cents per pound; in 1878, 54,046,771, 5,009,856 dols., 9.27 per pound.

The exports of salted beef have greatly increased since 1867, though not so rapidly as fresh and preserved meats. The following are the quantities and values:—

	Lb.	Value—Dols.
1867	14,182,562	1,727,350
1868	22,683,531	2,694,011
1869	27,209,197	2,430,357
1870	28,727,773	1,939,778
1871	43,880,217	3,825,666
1872	26,652,094	1,870,826
1873	31,605,196	2,447,481
1874	36,036,537	2,956,676
1875	48,243,251	4,197,956
1876	36,596,250	3,186,304
1877	88,716,511	7,539,955
1878	38,831,379	2,973,234

The requirement of the live meat trade, as well as that of fresh beef, is larger size and finer quality than our average be f; and the ruling necessity of the time is higher and more continuous feeding, both for economy in fattening and superiority in quality; and such improvement is in the direct line of advance in breeding, and progress in intensive and rational ag culture.

England long ago discovered that the grazing districts, the hill lands, must grow their stock, and richer lowlands must fatten it. It may be that the Central West will have to adopt the plan of rapid fattening of bullocks brought from distant grazing lands; in fact the practice is already in vogue. It is known to the skilled feeder that the cost of a pound of added weight in Summer fattening, upon grass supplemented with corn, is but a fraction of the cost of a pound of Winter-fattened meat. Then by continuous feeding there may be a saving of one Winter in the growth of a herd of Beeves; and by better protection from cold in Winter a further saving made. There is much of economy yet to be learned in the production of beef in the East, as well as in the West. England has already saved one year in the life of a bullock, and the demand there now is for beef of two years old.

#### EXPORTATION OF PORK PRODUCTS.

The value of all the exports of bacon and hams, pork and lards, from 1821 to 1854, was as follows:—

	Dollars.		Dollars.
1821	1,354,116	1838	1,312,340
1822	1,357,899	1839	1,777,230
1823	1,291,322	1840	1,894,894
1824	1,489,051	1841	2,621,537
1825	1,832,679	1842	2,629,403
1826	1,892,429	1843	2,110,000
1827	1,655,698	1844	3,236,476
1828	1,495,830	1845	2,991,268
1829	1,493,629	1846	3,883,884
1830	1,316,245	1847	6,630,842
1831	1,501,644	1848	9,003,272
1832	1,028,196	1849	9,245,885
1833	2,151,558	1850	7,550,287
1834	1,790,001	1851	4,368,015
1835	1,776,732	1852	3,765,470
1836	1,383,344	1853	6,202,324
1837	1,899,796	1854	11,061,016

The smallest export of bacon and hams was 965,935 pounds, in 1837; the largest in 1849, 56,060,823 pounds. It reached 2,000,000 pounds only twice in the first twenty years, in 1829 and 1830; jumped in 1847 from 3,006,630 to 17,921,471 pounds at the period of the Irish famine, and reached 33,561,034 in 1848. Lard exports during this period ranged from 3,996,661 pounds in 1821 to 54,935,546 pounds in 1850. As with bacon, the heaviest exportation was between 1846 and 1850. Exports of salted pork ran from 4,510,000 in 1836 to 50,697,200 in 1849, usually ranging between 10,000,000 and 20,000,000 up to 1841, but smallest in the years of monetary depression following 1837, and largest in those from 1846 to 1849. The separate values of exports of these products since 1854 is thus stated:—

	Bacon & Hams, Dols.	Lard, Dols.	Pork, Dols.
1855	3,195,978	4,018,016	4,390,679
1856	3,863,328	3,870,949	5,029,940
1857	4,511,442	5,144,195	2,895,867
1858	1,957,423	3,809,501	2,852,943
1859	1,263,042	3,268,406	3,355,746
1860	2,373,168	4,545,831	3,132,313
1861	4,848,339	4,729,297	2,609,318
1862	10,290,579	10,004,521	3,980,153
1863	18,658,286	15,765,570	4,334,775
1864	12,323,327	11,260,728	5,323,030
1865	10,636,608	9,134,858	6,850,808
1866	6,269,796	5,970,651	4,768,454
1867	3,291,176	6,634,556	3,597,190
1868	5,478,998	9,427,831	3,267,652
1869	7,482,060	7,443,948	3,432,928
1870	6,123,113	5,933,397	3,253,137
1871	8,126,693	10,563,923	4,302,329
1872	21,126,592	20,177,619	4,122,308
1873	35,022,137	21,245,815	5,007,035
1874	33,383,908	19,308,019	5,808,712
1875	28,612,618	22,900,522	5,671,496
1876	39,664,456	23,439,485	5,744,022
1877	49,512,413	25,582,665	6,296,414
1878	51,750,205	30,014,023	4,913,145

It is a fact strongly suggestive of the great recent advance in the area and production of the corn crop, that a greater value of pork products have been exported in seven years, since the large crop of 1871, than in the period of fifty-one years preceding. An export value of 458,267,601 dols. in these three items has been recorded in seven years, an average of 65,466,800 dols. per annum. The pork products in the exports of last year represented seven-tenths of all provisions, including fresh and salt beef. Verily, the hogs are bringing home our bond. The receipts from exports of pork products reached ninety millions of dollars last year, or half the value of the cotton export. It was nearly eighteen times the value of the fresh beef export, which is creating so much stir in the rural circles of the mother country.

#### CORN AND PORK.

What has so swollen this trade of late? The higher wages of British labourers have enabled them to live better, and the amelioration comes largely in the form of meat, which was formerly a rarity, to be indulged in once or twice a week. This renders a demand possible, and the abundance and cheapness of our corn since 1875 reduces so greatly the price of pork products that a greatly increased quantity can be paid for. Note the parallel between the export prices of corn and of pork.

	Corn.	Bacon & Hams.	Pork.	Lard.
1874	71.9	9.6	8.9	9.4
187	89.7	41.4	10.1	13.7
1876	87.3	12.1	10.6	13.3
1877	58.7	10.7	9.0	10.8
1878	56.2	8.7	6.8	8.7

The high price of corn in 1874, due to a short crop, had its full effect on the prices of pork in the succeeding year, and the cumulative effect of the large crops since that date is seen in constantly declining prices, which have gone still lower than the above record of 1878. Here is a fall in three years of 33 per cent. in corn, accompanied by a decline of 36 per cent. in lard, 32 in pork, and 24 in bacon and hams. The great surplus of corn has, during the past year, depressed prices of

pork below the level of depreciation in corn. The increase in exports during this period shows the effect of low prices in stimulating shipments:—

	Bush.	Lbs.	Lbs.	Lbs.
	Corn.	Bacon & Hams.	Pork.	Lard.
1874.....	34,434,606	36,036,537	70,482,379	205,527,470
1873.....	85,461,098	592,814,351	71,889,255	342,667,920

#### THE MEAT WE EAT.

As corn is our principal crop, so pork is our principal meat, constituting fully half of our meat production. In France, pork constitutes but 30 per cent., and beef 55, of the meat production, and mutton but 13½. In Great Britain, mutton and beef share more equally in the production, swine flesh occupying nearly the place as mutton in France.

Our meat surplus which is exported now amounts to a quantity equal to two-thirds the entire production in France, and nearly half of that of England. Apparently, about one-sixth is now exported, leaving something more than six thousand millions of pounds for home consumption, say 130 pounds per capita. In comparison with this supply, France uses about four-tenths and Great Britain eight-tenths as much. Without presuming upon an exact estimate, there are data for a result somewhat closely approximating this. The export of last year, 1,007,371,526 pounds of pork products, and 29,284 hogs, is evidently between 27 and 30 per cent. of our total hog product. Of beef the export is less than a fifth as much, including live cattle, and probably less than one-sixteenth of the beef production.

#### THE DAIRY INTEREST.

The extravagance of recently ill-advised and carelessly-considered statements of the quantity and value of dairy products demands correction. It has been so often reiterated in dairy conventions that the butter product is 1,500,000,000 pounds, and that 350,000,000 pounds of cheese are made, that some intelligent people are disposed to accept the estimates. Neither the records of local supply nor the statistics of the number and milk-yield of milch cows warrant any such assumption. It would require 19,000,000 cows to produce such a result, in addition to the requirements of the fresh milk trade and consumption in farmers' families. As large an estimate as any well-informed statistician can make is 950,000,000 pounds of butter and 310,000,000 pounds of cheese. Northern men are apt to ignore the effect of the low Southern production, upon a national estimate. While New York averages about 475 gallons per cow, and a few other dairy districts come up to 450 or 425, the central belts of States drops below 300, and the southern below 200 gallons actually produced. The average might reach 325 gallons, and possibly not so much. The fresh milk consumed is a larger proportion than has generally been supposed. I have a mass of facts bearing upon these local differences in rate of production, of milk, of butter, and of cheese, of which your space will not permit present consideration.

In conclusion, a comparison of the prices of beef and pork, and the prospective demand for each, encourage a larger production of beef. It will have a steady demand, while that for pork will fluctuate more with rise and fall of price.

The signs of the times imperatively demand greater weight and higher average quality in beeves. The means of procuring such a result are consistent with and productive of greater economy in production and true progress in agriculture.

Prominent among these means is a more rapid and more regular rate of growth, from calfhood to butchering, the lack of which is now a cause of loss of many millions annually, in many cases of all the profit of fattening. As corn and grain become dearer these economies will be enforced as never before, driving the careless and unskilful from the business of feeding.

Swine growers should not commit the customary folly of leaving a business when prices are lowest, and the tide is beginning to turn. One's eggs should be distributed in various baskets.

The reduction of fertility of wheat-growing districts, it should be remembered, may be prevented seasonably by the introduction and preminence of cattle growing.

In the next twenty years the cattle farmer will distance the wheat farmer of the West in the race for wealth and comfort.

## DEPRESSION IN AGRICULTURE.

Mr. James Howard writes to the *Times* :—

Having had advantages which fall to the lot of few practical farmers in becoming acquainted with the agriculture of most parts of the United Kingdom, as well as that of the continents of Europe and America, I desire, without assuming the office of teacher, to place before your readers a few thoughts upon the above subject. Having important interests bound up with the welfare of agriculture, and being a large farmer as well, I have a deep personal concern in the subject upon which I write.

That the prostrate condition of agriculture demands consideration I take for granted; the spirit of improvement so observable a few years ago, has departed altogether. I therefore at once proceed to inquire what remedies are within reach that will enable the present or future race of farmers to cultivate the land of Great Britain to a profit, and to withstand the fierce foreign competition which has set in. Apart from the question of more propitious seasons, which are beyond our influence, the hindrances which exist divide themselves naturally under three heads—1. Those which the farmer himself has power to overcome. 2. Those which landowners can remove or lessen. 3. Those which the Legislature can deal with.

In a former letter I took upon myself to defend the farmers of England against certain charges brought against them by your correspondents. If in pointing out some remedies within their own power I allude, upon the present occasion, to one or two of their shortcomings, it is in no unfriendly spirit. On the contrary, I do so with a sincere desire to advance their interests and enable them to meet the difficulties of their position. None will dispute that knowledge in farming, as in every other pursuit, is the great essential to success. The question every farmer of the present day, especially every young farmer, should ask himself is, Do I avail myself to the fullest extent of the sources of knowledge at my command? In no other business are there such facilities for gaining information upon any subject, and every branch of a subject, as in agriculture. There are no trade secrets; one farmer does not, like a tradesman in the same line, look upon another as a rival; the most successful carries on his operations in the broad light of day, and, as a rule, is ready to communicate his knowledge to a brother farmer.

Foreign agriculturists come to England in great numbers to study the best examples of English and Scotch farming, and they avail themselves of these invaluable sources of knowledge to a much greater extent than do the English farmers themselves. I may be told that the place for a farmer is at home; but it has often occurred to me that at our great agricultural meetings how much better the time of many a visitor might be occupied in studying the best examples of farming in the district than in gazing on animals and objects so similar to those he has often seen before.

Of late years the Royal Agricultural Society has awarded prizes for the most successfully-managed large and small farms, both arable and pasture, in the respective districts of its annual shows. The practice has opened up a most valuable source of information, and those who have not the opportunity of visiting these farms may read in the *Royal Agricultural Journal* the reports of the judges, describing in the most minute and practical way the management of each competing farm. Valuable and instructive as are these reports, it is a fact that they are comparatively little read; indeed, it is rare to meet a practical farmer who has read them. Again, newspapers and periodicals devoted to agriculture in Great Britain are beyond all comparison ahead of those of any other country; but from the smallness of their circulation it is evident that these sources of information are, to a great extent, neglected. How, it may be asked, is it possible for a farmer, any more than an engineer, to keep abreast with the progress of the day, in this age of discovery, without his class newspaper or magazine?

To show the value of technical knowledge to the farmer, I would cite the gross and extensive frauds which have been perpetrated of late years in manures and feeding stuffs. These would have been impossible had there been a higher and more general state of intelligence among farmers. It is notorious that these frauds have not been attempted with the educated few, but among that other and larger class.

One of your correspondents on agricultural depression pointed out the superior knowledge of the French in Dairy practice. From the current number of the *Royal Agricultural Journal* the English dairy farmer may gain a thorough knowledge of the best and most modern systems practised in the best dairies of France. It is to be hoped that this valuable report will lead, not only to dairy reforms, but to the introduction of the French commercial system, by which the butter undergoes the process of improvement at factories after it has left the farms. In Ireland there is greater need of dairy reform than in any portion of the United Kingdom. If the Irish exercised the same skill as the Danes or Swedes, to say nothing of the French, millions sterling would speedily be added to their national wealth.

To return to the more general question of farm management, I would point out that there are two opposite styles of farming which, in my experience, I have known successful. The one a parsimonious, routine, spend-nothing system, under which there is little risked, little raised, an absence of all enterprise, and the smallness of the returns balanced only by the smallness of the out-goings. It is obvious that such a system, although sometimes personally advantageous, is injurious to the labourer, the owner, and the public. The other style is a system under which the farm is, by large purchases of manures and feeding stuffs, made to yield the utmost possible amount of corn and meat, involving three or four fold the capital, far more supervision and anxiety, and, while there are chances of greater profit per acre, than under the hand-to-mouth system, the risk of loss from unfavourable seasons and other causes is proportionately great.

The farmer under the latter system, owing to the greater number of labourers about him, and the value of the numerous animals he keeps, in the hard times before him, will above all things have to bear steadily in view—the selection of his live stock, economy in their feeding, and attention to their health, the closest supervision of both manual and horse labour, the employment of the best machinery for all purposes where economy is to be effected by its use, and lastly, to watch the signs of the times with a view to adapt the product of his farm to changes in the market. These important matters attended to, household matters may be left to a prudent wife.

Many a tenant having, however, done his part, will not, unless the owner does his share and is willing to make some necessary sacrifices, be able to grapple with the difficulties of his position, and this brings me to my second topic.

## 2. What hindrances the landowner can remove or lessen.

To induce a tenant to farm with spirit, the first element, it is obvious, must be security—security not only that he shall reap what he sows, but that his own improvement of a farm shall not for a specified time lead to the raising of his rent. The plan of re-valuations, so often resorted to of late years upon estates, both large and small, has a paralyzing effect upon even the most enterprising tenant. Leases are often, for obvious reasons, objected to both by landlord and tenant; and where this is the case, with a view to encourage a tenant freely to embark his capital in the improvement of his holding, an undertaking might be given that no advance of rent should be asked for a prescribed period, and a two years' notice to quit agreed to.

The question of rents, if left untouched, would ultimately be settled by the natural operation of supply and demand; but in the meantime there would, with a continuance of low prices, be a gradual diminution of tenants' capital—about as injurious to the owner as the occupier. The Speaker's action, therefore, in making a present deduction and the resolution he has expressed, through the *Times*, of having a readjustment of rents, unless times mend, I take to be the right course and worthy of very general adoption.

Then as to the tenants' right to the value of his unexhausted improvements. Where there is an objection to the adoption of leases or of the Agricultural Holdings Act in its entirety, an owner, I venture to think, will do well either to adopt the compensation clauses of the Act or to give similar security by agreement, for by so doing he will be taking the most effectual step to attract more customers for his farms, more capital to his estate, reduce the chances of having to put in force the law of distraint, and lessen the risk of having his farms upon his own hands.

The cost of labour is the principal out-going upon a farm—

greater than the rent where much stock is raised; an adequate supply of labour is, therefore, of the utmost consequence to the tenant and little less so to the owner; for the value of an estate to a great extent depends upon the labour supply. Owners, therefore, who would maintain the value of their estates, and at the same time aid their tenants, will have to look well to cottage accommodation. To keep a full supply of labour in our rural districts sufficient cottage accommodation must exist, and this of a superior kind to be found in most of the villages of England; for as the people become better educated they will demand better homes, and if not forthcoming the more enterprising and best men will go where they are to be obtained. Experience leads me to the conclusion that nothing binds a labourer to his parish more than a good cottage with large garden, or an allotment ground; a good orchard is also much appreciated, and it is of great advantage to the labourer, for, while often bringing in a good portion of his rent, it entails little or no labour.

I will not touch upon the ticklish question of game beyond remarking that game-preserving owners will find it more and more difficult to secure good tenants for farms upon which anything like over-preservation is resorted to, or upon estates where Mr. Gamekeeper is regarded as a more important personage than the chief tenant. The days of ground game are unquestionably numbered.

One very general and formidable impediment to a farmer's success is the want of efficient and sufficient homestead accommodation. The production of meat has become as important a branch as corn growing, often greater. To carry on this branch, suitable homesteads are indispensable; it is now known that warmth and comfort are to the animals, equivalent to a certain amount of food, and no man can produce meat to a profit in cold, comfortless homesteads.

With the low prices for grain which may be expected to rule in the future, not a few landowners would do well to arrange with their tenants to bear a part of the expense of sowing down in grass a certain portion of arable land each year. Judiciously carried out, especially upon poor, heavy land, expensive to till, the value of the estate would be enhanced and the position of the tenant improved. The usual process, however, is expensive, and attended with much present loss to the occupier. As I believe that the sowing down of a large breadth of land is inevitable, I would point out that a few years ago I discovered by accident a plan of laying down by which the tenant may, in a great measure, be secured against the loss incident to the usual methods. If land intended for permanent pasture be sown with sainfoin or lucerne, and, when these plants begin to show signs of dying out, grass seeds in small quantity be sown, a good pasture, with the aid of small dressings of manure, will soon be obtained, and, as practical men will perceive, at no great sacrifice. If corn-growing should again become profitable, the same land will for many years be far more valuable for arable purposes because of the rest from corn-growing it has thus had.

I have left until last by far the most important consideration for both landlord and tenant—viz., the question of freedom in cultivation. How many of the difficulties which hamper the farmer would be swept away if freedom in the growth and sale of crops were conceded! That owners might grant greater freedom to their tenants, without damaging their own interests, accumulated knowledge abundantly proves. The important discovery of Mr. Lawes, known to every intelligent agriculturist, ought to assure owners how little they have to fear. To the lasting honour of this gentleman, he has demonstrated that no amount of bad farming can destroy the natural fertility of the soil. Through his long and well-conducted experiments we now know that the power to inflict permanent injury upon mother earth has been withheld. When a grasping farmer has exhausted what is well known as the "condition" in the land, Nature simply refuses to yield up her increase, and says, "Hither shalt thou go, but no further." Again, Mr. Lawes, by experiments carried on at Rothamsted for nearly 30 years past, has shown that land managed in accordance with the teachings of science may be cropped continuously without injury. To quote his own words: "I have taken the liberty of growing 37 crops of barley in succession on my land, and I am not aware that it is any the worse for it." Farther, "not only does the quantity keep up where it is continuously grown and manured with the proper manure, but the quality in weight per bushel is increased, so

that the average weight for the last 13 years is higher than that for the first 13 years." Again, the notion that it is indispensable to retain the straw grown upon the farm has been exploded by Mr. Lawes, also confirmed by the experience of Mr. Prout and others of his followers. Indeed, the material effect of straw has been shown to be all but nil.

No reasons, scientific or practical, remain why the farmer of the future should be tied down to the antiquated routine of the past. Let all such restrictions, begotten of suspicion and mistrust, be swept away, and let the British farmer be as free as those with whom he has to compete. No land agent is fit for his office who cannot protect the interests of the owner without crowding agreements or leases with covenants which hamper the liberty of the tenant, and which, if persisted in, will prove the most effectual means of checking the development of the vast industrial pursuit which ruin is staring in the face.

Small enclosures, crooked fences, insufficient water supply, are serious obstacles to the use of steam power in tillage. They lower the value of an estate and increase the farmer's difficulties and expenses. In the limits, however, of a letter, it is impossible to call attention to all the various things which the farmer and the landowner may do to their mutual advantage to improve the position of our agriculture. I therefore pass on to consider those impediments to successful farming which (3) the Legislature can deal with.

The remedies so long contended for against the diseases to which the live stock of the country were subjected have for the most part been applied, and with signal advantage to the farmer and all concerned. Their effect will, moreover, be seen in the increased breeding of cattle which the security against disease has begun to inspire. Some zealous advocates are for carrying legislation further. Although for many years a strenuous advocate of restrictive measures, I am disposed to give the present regulations a full trial, and would rather the Duke of Richmond's attention should be devoted to the amendment of his Agricultural Holdings Act, believing it capable of bringing about some of those beneficent changes in British agriculture which I heard his Grace so graphically and eloquently portray when introducing the Bill.

The reason why the signal blessings this Act was to shower upon the land have been withheld is not far to seek. If the Government really believed that the Act was to renovate our agriculture, attract capital, and lead to the introduction of a new and prosperous era in farming, let it show its sincerity by repealing the clause which alone has rendered the tenants' position a dead letter. As long as the speeches of the Duke of Richmond and the Prime Minister remain upon the pages of "Hansard," it is idle for the Government or its supporters to ignore the influence a *bona fide* tenant right would exert. It is true that no immediate relief would flow from making the Agricultural Holdings Act a reality, but the effect would be as sure as it would be gradual. If we are to look for an increase in our food productions, there must be a corresponding increase of capital attracted to the land and embarked in its cultivation. A farm, in this respect, is precisely similar to a factory: increased returns involve increased capital.

The question of social standing may at first sight appear to be altogether foreign to the subject under consideration. My experience and observations lead me to a different conclusion. To say nothing of the more ambitious of farmers' sons, how many hundreds of young men of good birth and capital, brought up as agricultural pupils, who, fond of farming as they were, have been deterred from entering upon its pursuit by repelling causes, the want of legal claim to improvements, insecurity of tenure, game reservation, and other causes lowering to the farmer's independence, it would be difficult to estimate; but the annals of Cirencester and the memories of some of us who have had experience would supply a goodly catalogue.

Nothing repels capital and intelligence from an industrial pursuit more than loss of social status; on the contrary, raise the social standard and men flock into the ranks. As an example of this attractive force, I would, without remark, cite the veterinary and the sister medical professions. But it may be asked, what can the State do in a question of this kind? In answer, I would at once point out that by the adoption of the ballot, which abolished the farmers' political serfdom and secured his political independence, the Legislature took the great step in paving the farmers' way to a higher social position.

By another measure the Legislature, while doing an act of justice, may raise the status of the farmer another step. It must be obvious that so long as the law leaves the property of one class of the community dependent upon the will of another and a stronger class, the social position of the dependent section is lowered. What protection, I would ask, does the law throw over a certain portion of the tenants' capital sunk in or upon his holding in the shape of labour, manures, and materials necessary to the carrying on and improvement of his farm? I answer, practically none. Some of your readers may exclaim, Let him protect himself by agreement. Such an answer would be appropriate enough if freedom of contract were being discussed, but it is nothing to the point when the question is whether existing laws are equal and just. The law does protect the property of the landowner both in respect of capital and interest; the law of distraint secures the latter, and the right to sue for dilapidations the former, and at the same time permits him to appropriate, without compensation, what the Agricultural Holdings Act conceded to be the property of the tenant—a power retained under the hollow plea, freedom of contract.

Looking at the growing dependence on foreign countries for our food supplies and the rapid increase of our population, surely it behoves the Government and all concerned to use every effort to remove the impediments which stand in the way of that increase in our home productions which every practical man knows the land of the country to be susceptible of.

This letter has extended to an unforeseen length or I would have attempted to show how much the State might do for agriculture by other measures, especially by a department devoted to its interests, to the collection and diffusion of agricultural knowledge by a national system of technical education; but I propose, with your permission, to return to these and a few other topics at a future time.

## HISTORY OF CIRENCESTER COLLEGE.

The affairs of the College are attracting so much attention at the present moment that the following history of its early career will be read with interest. It is the principal portion of a paper contributed by Mr. C. Lawrence, one of the founders of the College, to the first part of the Royal Agricultural Society's *Journal* for 1865:—

### THE ROYAL AGRICULTURAL COLLEGE OF CIRENCESTER.

In the useful and masterly survey of the progress of agriculture, in a late number of our *Journal*, written in continuation of a similar review taken by the late Mr. Pusey at an earlier date, Mr. Thompson observes:—"The commencement of the Society took place during one of those recovering fits of associative activity to which Englishmen are periodically prone. He then explains that the Yorkshire Society was formed in 1837; the Royal Agricultural Society in 1838; and the Royal Irish Improvement in 1841. To these we venture to add the Royal Agricultural College at Cirencester, organised in 1842, and incorporated by charter in 1846. The Council of the Royal Agricultural Society having recently appointed a committee to consider and report on the actual state of agricultural education, we propose to give a brief history of this institution.

Only the elder members of our Society who are familiar with the state of the agriculture in England some thirty years ago, are able thoroughly to appreciate the progress and the improvement which have taken place in the interval. We speak of the general condition of the kingdom, without ignoring that there existed at that day many skilful and successful cultivators of the soil and breeders of stock—men in advance of their age. But others who bear in mind the success of the annual meetings of our Society, which, visiting every district of the kingdom, has exhibited to a class of men not generally given to migrate far from home, the best stock of every description, with a wonderful display of implements—demonstrations far more influential on the minds of farmers generally than any descriptions in print—and who further duly estimate the worth of the investigations and experiments of our agricultural chemists, and other scientific men recorded

in the Society's Journal, will readily concede that the signs of progress are manifest, and that these are in great measure attributable to the exertions and influence of this Society.

The Council has, nevertheless, been recently reminded that it has hitherto neglected one important duty of those enumerated in our charter, namely, "to take measures for the improvement of the education of those who depend on the cultivation of the soil for their support."

While in connection with nearly all other arts, educational training appears to have become more or less systematised, we are not aware of the existence of any institution in England especially devoted to the instruction of those who require that knowledge and experience which improved agriculture calls for, with one exception.

It is remarkable that while public schools of agriculture exist in nearly every other country of Europe, the only institution of the kind in England, viz., the Agricultural College of Cirencester, should have originated in a small local farmers' club.

A brief history, then, of the origin, progress, and actual state of this establishment may be acceptable to the readers of this Journal.

This College originated in an address made by the late Mr. Robert Jeffries Brown, to a meeting of the Cirencester and Fairford Farmers' Club, held in November, 1842, "On the Advantages of a Specific Education for Agricultural Pursuits."

At a subsequent meeting of the Club, held on the 29th December, 1842, at which Mr. Edward Bowly, a member of the present Council of the Royal Agricultural Society, presided, a public address was agreed on, from which the following are extracts:—

"We, constituting the Cirencester and Fairford Farmers' Club, having fully discussed and maturely considered the subject brought before us by Mr. R. J. Brown, feel that we cannot too highly estimate the importance of a specific education for those engaged in agricultural pursuits; and the great value to them of a knowledge of those sciences that are in constant operation in the cultivation of the soil, the growth of crops, and the rearing and feeding of domestic animals; and we think it most essential that the study of these sciences should be united with practical experience. The advantages of an institution of this kind to the landowner, as well as to the occupier, are too obvious to require comment; and we confidently rely on their cordial co-operation and support."

A deputation, appointed by the Club, having obtained the patronage of Earl Bathurst and other noblemen, and the principal gentlemen in the neighbourhood, attended meetings convened for the purpose at various market towns, in order to procure the support of the tenantry. The late Mr. R. J. Brown devoted nearly the whole of the following year to the task of explaining the object in view to landowners and occupiers in various parts of the kingdom, with considerable success. A public meeting was held in Cirencester, under the presidency of Earl Bathurst, in April, 1844, at which it was resolved on the motion of the late Earl Ducie, seconded by Mr. Kearsay, a tenant-farmer, "That it is expedient to provide an institution in which the rising generation of farmers may receive instruction at a moderate expense, in those sciences, a knowledge of which is essential to successful cultivation; and that a farm form part of such institution." A Committee was then formed to determine on a plan for such an institution, and on the best means of carrying it into effect.

A further meeting was held on the 1st July, 1844, at which it was reported that Lord Bathurst had offered a farm of upwards of 400 acres for a long term of years, and adjacent to it a site for the erection of the College, with some pasture land, on a lease for 99 years. The Society was then definitely formed; a president, vice-president, and trustees were appointed, and it was resolved that a Charter of Incorporation should be applied for.

The annual meeting of the Royal Agricultural Society of England was about to be held at Southampton in the course of that month, and a deputation, consisting of Earl Ducie, Mr. Holland, Dr. Daubeny, Mr. Edward Bowly, and several tenant farmers, was appointed to attend the meeting at Southampton, with the view of obtaining the sanction of the Council for a public meeting which it was proposed to hold under the patronage of the Society, while agriculturists from

all parts of the kingdom were assembled. This sanction not having been given, the deputation ultimately resolved to hold an independent meeting. The late Mr. Pusey presided, and it was attended by the late Duke of Richmond, Earl Spencer, Dr. Buckland, Mr. Sotherton Esq., Dr. Lyon Playfair, and many others distinguished by their scientific and practical knowledge of agriculture. The views of the promoters of the College having been explained, resolutions were proposed and carried to the effect that the institution was deserving of public encouragement and support.

By the persevering efforts of Mr. Brown and others, amongst the nobility and landowners in various parts of the kingdom, a subscription of £12,000 was raised, the full amount of the capital required according to the original proposal.

A charter was obtained in March, 1845, incorporating the governors, proprietors, and donors, under the title of the "Agricultural College for teaching the science of Agriculture and the various sciences connected therewith, and the practical application thereof to the cultivation of the soil, and the rearing and management of stock.

The sum of £12,000, however, was soon found to be inadequate to the completion of the projected College, irrespective of adequate farm buildings, and other essential adjuncts. It was therefore provided by the Deed of Settlement, that the capital should be increased to £24,000; but after every exertion it was found impracticable to extend the subscriptions and donations beyond the amount of £20,320. The expression of opinion in favour of an institution of this kind was so strong and general as to render the earlier administrators of its funds somewhat over-sanguine as to success. This led to a premature extension of the College by the immediate erection of some buildings, which it had been originally intended to leave till time should show what amount of accommodation was necessary. The day of reckoning, when it arrived, presented a result in conformity with general experience in such cases—the buildings with all the incidents essential to the actual occupation, had involved an outlay considerably beyond the estimates.

There having existed no precedent in this country as a guide to the Committee of Management, mistakes of one kind and another were unavoidable, and admitted of correction only in the expensive school of experience. The providing of competent professors and of the domestic staff for such an institution involved an immediate annual outlay, while an adequate income from students was only prospective. The fee first fixed for the board and instruction of students was £30 per annum only—a sum which about met the demands caused by the keen appetites of youngsters spending the greater part of the day in the invigorating air of the Cotswolds, leaving the interest on capital, and the cost of professors, &c., unprovided for. In the year 1848 the account at the bankers was found to be overdrawn to the extent of £10,000. A meeting of the promoters of the College was convened to consider its financial condition. There appeared to be no alternative but the closing the institution at the end of the actual session, for want of adequate support. Before that resolution was finally passed, Mr. Holland, who was in attendance as vice-president, expressed his strong and unaltered opinion of the necessity of such a school of agriculture, and his confidence in its ultimate success, adding that he would take on himself the responsibility for the existing debt. The meeting was then adjourned for further deliberation. At the adjourned meeting the late Earl Ducie attended, and not only supported Mr. Holland's views, but with his characteristic liberality stated that much more would be requisite than a mere provision against the existing debt, and that there ought to be at least an equal amount in the banker's hands to meet further outlay, without which the establishment would be too imperfect to command success. His lordship added that he could not allow the burden to rest on Mr. Holland's shoulders alone; and ultimately the support of the institution, with all its liabilities, actual and prospective, were undertaken jointly by himself, Earl Bathurst, Mr. Sotherton Esq., and the late Mr. Langton, in connection with Mr. Holland. Upwards of £30,000 were thus added to the original subscriptions and donations, on the personal security of those gentlemen.

Under these circumstances a general meeting of the original subscribers and donors was convened in London, to consider and determine on the future management of the institution.



It became necessary to apply for a supplemental charter, in order to vest the management of the college in those gentlemen during the continuance of their liabilities, and to give them such security for their advances as the very limited means of the institution admitted of. This further charter was granted in July, 1849, whereby the corporation was empowered to obtain in the usual mode an additional capital of £20,000 (making in all £44,000), with power in the meantime to raise funds to that amount by a mortgage of the property and effects of the college. The guarantors were thereby also appointed a committee to manage the affairs of the college as the ordinary council of the college had been authorised to do by the original charter.

#### THE BUILDINGS.

Of these the principal is the College itself, erected in an elevated and healthy spot facing Lord Bathurst's beautiful park, to which the students have access, while the south front commands extensive views over Wiltshire. Within the walls accommodation is provided for eighty-five students: there is a commodious dining-hall; a museum of the same dimensions, rich in specimens illustrative of the lectures on veterinary surgery and practice, geology, mineralogy, and botany; and a theatre for the delivery of lectures. Various alterations in, and additions to, the College in the shape of private studies, &c., have been made, for the accommodation of a class of students resorting to the College willing to engage them.

Contiguous to the College, but in a distinct building, has been formed, out of an old barn, one of the best laboratories in England. A portion of this has been fitted up with all requisite stoves and other appliances for the special use of the Chemical Professor and his assistants; the remainder is adapted for the use of students. In the former division, our late Professors, Mr. Way and Dr. Voelcker, have performed a large proportion of those analyses which have enriched the pages of nearly every number of this Journal.

A chapel has of late been erected at the back of the College, affording ample accommodation for the students, and the entire establishment of the College, in which morning and evening prayers are read daily by the Principal, besides the usual services on Sundays. The more ornamental portions of the chapel have been executed by private subscription.

The farm-buildings are on a large scale, and stand about a quarter of a mile from the College. Adjoining a well-arranged rickyard is an ample barn, with granary, a fixed steam-engine, thrashing, chaff-cutting, grinding, and other machinery attached; and at one end of this pile of buildings is the dwelling-house of the farm manager. At the other end are implement and cart sheds. To the east are the carpenters' and smiths' shops, slaughterhouse, and weighing-machine for cattle. The next row of buildings is devoted to the stables, harness-house, &c., with piggeries on the west side; and a third comprises a double row of cattle-boxes, on the west of which are two yards for store cattle, surrounded by covered sheds.

Adjoining the turnpike-road from Oxford to Bath, which intersects the farm, is a veterinary hospital, under the management of the veterinary professor, fitted up for the reception of all animals requiring operations, or treatment for disease, accident, or other ailments. The public are invited to send animals so circumstanced, which are treated at a moderate charge, in order that the students may have the advantage of ocular demonstration of disease and its treatment, by the professor, in aid of his lectures in the theatre.

In the cultivation of the farm are employed Mr. Fowler's steam-engine, plough and cultivator attached, besides an assortment of all the most improved implements.

The permanent establishment of the college, under the general superintendence of the council, consists of the principal, a clergyman of the Church of England; the farm manager and demonstrator; the chemical professor and his assistant; and professors of botany, veterinary surgery, mathematics, and surveying, all resident; and a drawing master. Gentlemen distinguished for their ability in the respective sciences connected with agriculture are secured to give occasional courses of lectures, in addition to those of the resident staff.

There are four sessions in the year, in each of which a complete course of lectures is given in each department of science taught at the College. The programme for each week com-

prises instruction in practical agriculture, on the farm daily, commencing 6.30 a.m. Lectures are distributed over the remainder of the day, excepting Saturday, on the following subjects:—Chemistry, applied, organic and inorganic; botany; veterinary surgery, anatomy, and pathology; therapeutics; mechanics, mensuration, surveying, and drawing to those who desire such instruction.

Such is an outline of this institution and its establishment, provided by the disinterested contributions and munificent supplemental support we have described, for the advantage of the rising generations of agriculturists, at a cost exceeding £50,000.

To say one word on Professors. The Council in early days fortunately enlisted in the cause of agriculture the services of Professor Way, though these were lost to the College on his promotion to the post of Consulting Chemist to the Royal Agricultural Society, and subsequently were transferred to advantageous employment for the public at large. His successor, Dr. Voelcker, until very recently held the two appointments conjointly, with mutual advantage to each Society. The Council have since been fortunate enough to engage the services of Mr. Church, a gentleman of considerable eminence as a chemist, who is now resident at the College.

Happily, both the late Mr. Haygarth and his successor, the present Principal, had eminently qualified themselves for this post, by cultivating a natural taste for general science to an extent unusual in members of their profession. Mr. Constable not only fulfils with zeal and energy the duties which strictly belong to his appointment, but is competent and anxious to assist students in the general course of their studies, especially those connected with practical agriculture. In furtherance of this object, he has lately prepared and published an excellent Manual, entitled "A Guide to the College-Farm and Cultivation-Book, for the use of Students."

There is no greater mistake than the too prevalent notion that any member of a family who has not sufficient capacity for more intellectual avocations may, with very little previous instruction, become a successful agriculturist; and that whilst most handicrafts require a seven years' apprenticeship, residence with a farmer or at this College for a year or two is an all-sufficient preparation for taking a farm. Our own observation would lead us to recommend any youth resolving on agriculture as his occupation in life to place himself with a tenant-farmer for a year, to acquire what may be called the Grammar of Agriculture; with this preparation he would be in a position to derive greater advantage from a two years' course of instruction at the College; after this, two years' residence with a skillful farmer, with careful daily observation and the study of the most approved agricultural literature, would form a reasonably safe foundation to work upon.

**SPANISH FOWLS FOR EGGS.**—The laying qualities of Spanish are well known. High breeding has within the last twenty years perceptibly diminished the good qualities of many strains, but enough still remains to justify a very high character as layers, about 180 eggs per annum being an average many birds will attain, if properly fed and managed. The egg is very large, with a smooth white shell, both of which qualities cause it to command a good market; but it must be admitted that to most palates the flavour is far inferior to Cochins or Braham eggs, the yolk being smaller in proportion and rather insipid, the chief bulk being made up of albumen or white. On the other hand, this very absence of flavour causes their eggs to be preferred by many invalids, and other persons of delicate appetite. The pullets usually lay at or before six months old, and will continue through the winter but the hens rarely begin till January, after which, however they rarely stop more than a day or two until the autumnal moult. The appetite being only moderate, and the birds bearing confinement well, and never giving trouble by any sitting propensities, they make a very useful and profitable variety for urban or suburban poultry-keepers, who wish for a fowl which combines with these qualities an always creditable appearance. Perhaps no breed will answer these conditions better than the Spanish.



## BEDFORD SEWAGE FARM.

The inhabitants of Bedford have much reason to congratulate themselves on the prudence and wisdom of the authorities of the town in relation to this farm. No wild scheme in the shape of settling and precipitating tanks and filter beds was ever tried—projects that cost many towns thousands of pounds; but on the contrary the mode originally projected of utilising the sewage over the land has been carried out, and after all the experience since acquired it proves the most economical and efficient. From a financial standpoint the Bedford farm and system stand out as a model compared with most other sewage farms. The past years have, indeed, been trying years for sewage; but the farm, notwithstanding that, has stood its ground well. In the three years of 1875, 1876, and 1877 the rainfall was excessive; for we find, according to the records kept at Cardington, that the aggregate precipitation was 85 in., which is more than what has fallen in four successive years in some of the past cycles of dry years. Last year was likewise unfavourable in consequence of the heavy downpours of May and August.

We think it was a right resolution of the Town Council to publish the details of the balance sheet, as we believe there is nothing to conceal; it concerns all, and sewage farming ought to be judged on its own merits. Whatever amount of discussion it may lead to, truth never suffers by ventilation and discussion. From the precise tabular statement of the acreage, the average price per acre, and the total produce of the several crops drawn out by Mr. Collett, the manager of the farm, we find the following to be the average prices per acre of the respective crops for the last four years:—

	£	s.	d.
Italian ryegrass .....	12	2	8½
Mangold .....	13	6	6½
Swedes .....	13	7	8
Carrots .....	14	7	11½
Paranips (two years' average) .....	18	17	9
Potatoes .....	11	13	11
Onions .....	30	16	1½
Wheat .....	11	10	7½
Oats .....	10	13	4
Beans .....	10	14	5½
Spring cabbage .....	13	3	8½
Pickling cabbage (three years' average) .....	15	10	10½
Savoy (three years' average) .....	14	18	1½
Cauliflowers .....	17	17	10½
Kidney beans (three years' average) .....	20	6	7½
Celery (three years' average) .....	45	14	9½
Cucumbers .....	17	14	1
Vegetable marrows (three years' average) .....	16	18	0
Asparagus .....	40	2	0
Rhubarb .....	23	17	6
Prickly comfrey (one year) .....	10	0	0

These include all the crops except the permanent pasture and some ground for seed-beds—the total extent being 180 acres 3 rods and 30 poles, and the rent of the same is £928 10s., which is £5 1s. per acre. The largest sums obtained for the crops of the past four years are mainly three, namely—for mangel, £2,094; ryegrass, £1,275; and for onions, £1,600; but unfortunately neither the mangel nor the ryegrass commands satisfactory prices. The average annual loss in the past years, according to the way in which the balance sheets are presented, is about £300, but should the two crops referred to realise their value, the £300 would be obtained. For example, the average price for the ryegrass in the two past years has only been £9 an acre, but with the ordinary breadth grown had it commanded the price of 1875 it would have produced £240 to £250 more. Again, estimating the mangel in the same way, £50 to £60 additional would have been obtained. So we see that the opinion of Mr. Morton, in the report of the farm which he drew out in 1873, is not very far from being realised, namely, that the farm is not so over-rented as to make a profit impossible.

Both the Italian ryegrass and the mangel are crops that must be sold in the neighbourhood, as they would not afford carriage by railway, and this state of matters is very disappointing to the farm committee and manager. They appear to think that stock or dairy cows should be purchased for

consuming the surplus food, although misgivings may be entertained by some as to the propriety of such a step. Mr. Garrett, the manager of the Banbury sewage farm, reduces the acreage of these crops to the requirements of the town and neighbourhood. He generally mows his ryegrass four times in the year, and he limits its growth to about twenty acres, and, although he grew twenty-six or twenty-eight acres, it would not bring more money than the twenty acres. How far the abridging of the growth of ryegrass on the Bedford farm would consist with the disposal of the 700,000 gallons of sewage delivered daily at the pumping station is a matter for consideration.

Great crops are annually grown of Italian ryegrass, mangels, cabbages, and other plants, and the greater part of the soil is of a rich friable nature and easily wrought. Onions, it will be seen, command over £30 an acre on the average, and Mr. Collett is wisely extending their cultivation, for in 1875 there were just ten acres, and last year there were over sixteen acres grown. They are indeed an expensive crop, and do not bear heavy soakings with sewage. The small plot of celery commands the highest acreage price, and perhaps its cultivation may be profitably extended. It is a difficult and expensive crop to produce under ordinary cultivation; but it must surely be a paying crop, for the market gardeners on the south side of London pay a rent of £16 an acre for the black soil on which they grow it. In accordance with the expressed opinion of Mr. Howard and others, it may be possible to extend still further market gardening crops, and those that command the highest price per acre. On Barking Farm as much as £100 an acre has been obtained for strawberries; but it has the advantage of being in the vicinity of London, for unless for preserving they are a perishable article. In some parts of the country they are grown on miserably poor soils, and we have known them make £50 and £60 an acre in the third and fourth year of their growth.

The Edinburgh meadows are often quoted as a paying concern, and as £30 to £40 an acre has been realised on some years there is no sewage comes up to them. In the year in which we last saw them the average we were told was £24. The elements of the success of the Edinburgh farm are mainly two; in the first place it is under permanent grass, and costs little more in labour than the attendance required for distributing the dirty water. It is managed on the "catch-meadow" system, like those in the south-west of England, adopting more or less the Bickford plan, which has been justly styled the triumph of agricultural art. Generally the flooders may be said to be self-taught, and the mode and management are acquired by instinct. The other great advantage that Edinburgh has is, that there is a ready market for the grass, in the large number of cow-feeders (dairymen) in the suburbs of the town, who have long made a living by keeping cows and selling their milk in the town. Although the climate is four to five degrees colder at Aberdeen than here, the sewage farm there is cropped very much as in the South. The climate is too cold for mangel, and Aberdeen bullock yellow turnips are substituted. It is a light sandy soil well adapted for sewage, and we were surprised when shown the gross proceeds of sales for five years that the average net proceeds were £16 an acre. The crops were not equal to those on the Bedford farm, but prices owing to a large consuming population are higher.

But for the unfitness of a corporation to become dairy farmers, doubtless milk cows would largely increase the annual proceeds of the Bedford Sewage Farm. The succulent grass would cause a large flow of milk, for even the grass grown on water meadows when used as hay is much valued by the dairyman. It is not probable that the people would have the same prejudice against the milk of cows fed on sewage produce as they have for the vegetables, for the inhabitants of Edinburgh, Leamington, and many other towns are largely fed on sewage milk. It is rather more than a year since an analysis was made of a number of samples of milk as delivered in Leamington, and it is noteworthy that the sewage milk from the Heathcote farm was found to be the richest and purest. Had not this paper been already too long, we should willingly have inserted the analyses of the several samples.—*Bedfordshire Independent*.

## THE AGRICULTURE OF WALES.

By GORDOVIC.

No. II.

In crossing over the borders from North into South Wales the impression made upon the traveller and the deductions he draws from his observations will depend on the greatest measure upon from what part of a given northern county he enters a southern one—in nothing more so than from an agricultural point of view. Not only do these remarks apply to north and south, but pre-eminently so to the first southern county I shall draw your readers' attention to. Four travellers, or inspectors, or tourists, may each select their own independent route of travel. One may leave Montgomeryshire somewhere in the neighbourhood of Eistedd fa Gerrig, and foot it along from the east to the west of the county of Cardigan. Another tourist may creep up to the crest of Pumlumon, and wend his way downwards parallel to traveller No. 1. A third may leave Machynlleth behind him, and cross Pont Lysnant, taking the turnpike-road along the table lands, cross Aberystwyth, and along the coast *via* Aberaeron to Cardigan. A fourth will enter the county by rail through Ynylas-Borth, Aberystwyth, and Tregaron. Were we to assume that each traveller kept his note-book well entered, and drew up a descriptive report from his notes, so unlike would each be that we should have presented to our view four counties instead of one, so diversified and distinctly different is this interesting county of Cardigan. One great objection to the views of some agricultural writers is, that not only do they select the farming of one of these lines as *the* farming of the county, but on it also they found an idealistic and imaginary state of affairs for the whole Principality, when it actually does not sit square on even the whole of their one county. Cardiganshire! A county of rich alluvial land, marsh land, bog land, table land, side land, upland, and mountain land; and all this variety well mixed with miles of moorland.

Bringing a description of its agriculture down to the latest date, and viewing the first farms I see from a Cambrian railway carriage, the astounding phenomenon presents itself to view of a series of farms the rents of which have been advanced in a remarkable manner during these disastrous farming years of '78-'79; not a paltry advance of some 10 or 20 per cent., but something considerably more. When farms to let, abatements of rent, agricultural distress, are the cries all over England, here is a South Wales estate that has been able to make the experiment of an enormous advance. It is true the tenants were years ago notified that such advance would be made. However, it has not been cheerfully acceded to, nor universally. Some of the best tenants, who adored their popular landlord and the no less popular manager of his estates, I am sorry to say, gave up their farms rather than accede to the advance demanded. This estate has been a generous and liberal one in every sense for several generations. It is quite possible that outsiders are not fully qualified as judges as to what is right or wrong in this raising of rents at such a crisis in agricultural affairs. I am not passing judgment; I am only stating facts, and will wait to see whether such advance can be sustained permanently. If I give your readers a few figures they will to many exhibit a curious state of farming past and present. I will select two mountain farms which between them contain nearly 1,200 acres, all sheep lands, except a few acres of pasture for the two dozen of cattle belonging to the resident shepherds. And what do your readers suppose were the yearly rents of these two farms? In round numbers just fifty pounds—not quite one shilling an acre. They were let at about that sum separately,

and have now been taken by new tenants at the advanced rent of about £84. And what number of sheep will these farms depasture? During summer from 1,500 to 1,800. In recent years, notably during the last seven, farms of this class have done well; mountain wethers, and store ewes, and Welsh wool have sold so well that the times have been flush with mountain farmers. There is, however, a most serious check to this desirable state. Wool is down in price 50 per cent. This long wintry winter—winter of seven winters in one—has played sad havoc with the mountain flocks. Lambs have died in thousands, and your readers may look out for a scarcity of Welsh mutton in the next few years.

If I leave the mountain at present and take a general survey of the county, I find, what I led your readers to expect, a very great diversity of farming—farming under the usages of a century ago, the exception; farming under the most modern and enlightened improved system, the rule. Draining, marling, bone-dusting, green and rotation of crops, are very general. Even steam-ploughing has been practised in this county for some years. The latter can be seen in all its perfection and imperfection close to Borth. For some unaccountable reason, however, the success acquired here in steam-ploughing will not end in its general adoption throughout the county.

Some parts of Cardiganshire are more arable than others. These farms occasionally have done well. The climate is favourable to the growth of superior grain. Bad harvests, however, and low prices, have played sad havoc with them. Many farmers also take great pride in growing fine crops of turnips, chiefly swedes. There is Mr. H. D., of near Talybout; he has hardly ever a poor crop, and several years he is prize-taker. Such a tenant-farmer as this should be most warmly encouraged.

When the cattle of Cardiganshire are examined, they are found to be the most heterogeneous in our island. Not a breed in Great Britain without being represented. The Blacks have been known for ages; with all their faults, and they are many, they are much sought after. They are purchased and sent in droves of hundreds to the midland counties of England. There is quite as good a market for the low-conditioned as for the high. There also you will find a few Castle Martins, and in several parts of the county very fine specimen herds of pure Black Welsh. A bull belonging to a tenant-farmer was exhibited last year which won universal admiration. Landowners and well-to-do farmers have also bred, and bred well, Shorthorn and Hereford cattle. Messrs. Fowler and Cottrell with their herds of Channel Islands and Ayrshire Cows have found good sales at Aberystwyth. Indeed, one or the other has an annual sale in this Brighton of Wales.

There is hardly a breed of sheep in Great Britain that is not represented here. The vast majority, however, are the Welsh Mountain. The wool of which is also worked in local "factories," producing Welsh flannels and lineys in great variety, not forgetting the warm home-spun cloth for the farms use.

If a Cardiganshire man is proud of anything, he is of his horse. The talk is big about horse.

This little county has always been great in fox-hunting. Its Lord-Lieutenant is a most popular M.F.H., and the whole people have a passion for the chase. Thoroughbreds and hunters have always been bred here. There certainly is no county in England, not even Norfolk itself, where the love for a trotting horse is so generally intense, as in Cardiganshire. Twenty or thirty years ago there was a splendid specimen of a rounder trotting stallion called Comet—"Old Comet" as he is now called. This horse was not only a great goer himself, but he got a race of fast-goers, which is not yet extinct. In the establishment of societies for the Improvement of Breeds of Horses this county took such a position a few years ago, as to obtain the public

notice of Parliament. An occasional pitch now and then occurs in local organisations. The good effects of improving the breeds of horses is not, however, all lost, even if the good does not show itself at once. This is a great affair and a long one. The public spirited men of Cardiganshire are equal to the occasion. This year Mr. Vaughan Davies, single-handed, went all the way to Scotland and engaged a first-class Clydesdale entire horse, becoming personally responsible for the high premium required for his use, and guaranteeing a certain number of mares. Where men of such elevated notions as these are found, progress and improvement will follow in their wake. The annual shows of entire horses are good.

The county has its chief northern show, and also some local societies. High-class judges are selected, one being generally an Englishman. These gentlemen inform the public by their yearly adjudications that there is much improvement in all classes of stock. The annual ploughing matches where 40 to 50 teams meet in the same field conduce to improving the quality of both work and workmen, and also in the pairs of horses.

From time immemorial Cardiganshire has been celebrated for its silver lead mines. The working of these mines on a large scale found employment for great numbers of the people—male and female, adults and children. If these advanced somewhat the rates of wages, farmers had to pay their labourers, they also created several local markets, and good ones, for all agricultural produce. To the town of Aberystwyth also there is an annual addition of some thousands of sea-side visitors. There, again, during the summer months there is a good market for poultry and dairy produce. The mines appear to have gone for good; they are things of the past; surely summer is not the same. Here this mid-April morn are all the characteristics of mid-winter. Frost, snow, hail, and fox-hunting. No one more than the farmer desires the departure of winter and the advent of summer. When the latter comes will it bring a better state of farming affairs? Whilst preparing for the worst let us hope for the best.

### THE WOBURN EXPERIMENTS.

Mr. J. B. Lawes, of Rothamsted, authorises us to publish the following observations on the Woburn experiments:—

It was not my intention to make any comments on the results obtained in 1878, as recently published in the *Journal* of the Royal Agricultural Society, but the remarks made at the meeting of the Council of the Society on Wednesday the 2nd inst., in reference to Mr. Cathcart, the previous resident manager, induces me to do so in justice to that gentleman. Mr. Aveling, referring to the present state of affairs at Cirencester College, is reported to have said, "that the confidence which ought to be felt in the Principal did not exist at the present time, and that the public confidence was likely to be weakened rather than strengthened by the appointment of Mr. Cathcart to the post of Professor of Agriculture, seeing that he was recently dismissed by the Society from his position as manager of the Crawley Farm."

I had nothing whatever to do, either directly or indirectly, with Mr. Cathcart's appointment to Cirencester, but I am decidedly of opinion that the circumstances under which he left Woburn do not in any way disqualify him for filling the post he now occupies. I thought at the time, and I still think, that Mr. Cathcart was very unfairly treated. The great difficulties involved in successfully bringing such an extensive series of experiments into working order were neither recognised nor allowed for. It was, however, expressly stated in the report of the Committee of Inspection, "that what had been done on the experimental plots appeared to have been very successfully accomplished;" but it was the neglect of Crawley Farm, which was merely auxiliary to the experiments, and of course of secondary importance, that was

alleged against him. On this point I may remark that no directions whatever had been given by the Committee in regard to the treatment of Crawley Farm, that it was received in an extremely foul condition, and that it was considered of importance, more especially in the first season, to devote all the time and energy possible to getting the experiments themselves into good working order, leaving the farm to be dealt with in any way that might be desired afterwards. As much horse and hand labour as could be spared from the experiments were, however, devoted to cleaning it; and I have no doubt it is now in a much better state, and much better than it could have been but for those efforts.

With regard to the experiments in Stackyard Field, in order to prevent the possibility of any complaints being afterwards made as to the state in which they were given up, I suggested to Mr. Wells, the chairman of the Chemical Committee, that it would be desirable to ask the attendance of those who would in future be responsible for their conduct before the management was transferred. Accordingly there was a meeting in the field on June 1, 1878. So far as I am aware, no complaints were then made; and from my experience in the conduct of field experiments I can say without fear of contradiction, that they were given up in a condition with which no fault could be found.

Confining my attention on the present occasion to the continuous wheat experiments, I will now institute a comparison between the results of 1877 and those of 1878.

The same manures were applied to the same plots in each of the two years, and the following table gives the produce of corn obtained:

No. of plot.	The manure applied per acre.	Dressed corn p. acre.	
		1877.	1878.
		Bushels.	Bushels.
1	Unmanured .....	22½	15½
2	200lb. ammonia salts alone .....	34½	16½
3	275lb nitrate soda alone .....	31½	11½
4	Mixed mineral manure alone .....	20½	10½
5	Mixed mineral manure and 200lb. ammonia salts .....	33½	18
6	Mixed mineral manure and 275lb. nitrate of soda .....	32	14
7	Unmanured (duplicate) .....	20½	12
8	Mixed mineral manure and 400lb. ammonia salts .....	43½	27
9	Mixed mineral manure and 550lb. nitrate soda .....	39½	26½
10	Farmyard manure estimated to contain nitrogen equal 100 lb. ammonia .....	18	12½
11	Farmyard manure estimated to contain nitrogen equal 200 lb. ammonia .....	18½	15½

It is granted that the season of 1878 was inferior to that of 1877; but whilst in the first year of such experiments some irregularities of result might be expected, owing to unevenness in the condition of the land previously farmed in the ordinary way, there are very much greater irregularities in the second year, and such as cannot possibly be explained by any differences in the character of the season, apart from the management.

In 1877 one of the unmanured plots gave 22½ bushels, and the other 20½ bushels, or only 1½ bushel difference on a yield of more than 20 bushels. In 1878 the one gave 15½ bushels and the other only 12 bushels, a little more than three-fourths as much, and showing a difference of 3½ bushels on a produce under 16 bushels.

As the experimental crop of 1877 followed an ordinary wheat crop removed from the land, the soil would naturally be relatively rich in available minerals, and poor in available nitrogen. The result was that the purely mineral manure gave practically the same, or even rather less than the unmanured land. In the second year, 1878, the mineral manure gave not only less than the lowest produce without manure, but only two-thirds as much as the highest without manure.

In 1877, on this somewhat wheat-exhausted land, ammonia salts alone gave an increase of about 13 bushels, and the same amount of nitrogen as nitrate of soda about 10½ bushels, over the mean unmanured produce. In 1878 the ammonia salts alone gave only 1 bushel more than the highest unmanured produce, and the nitrate of soda gave less than three-fourths as much as the ammonia salts, and less than the lowest unmanured produce. The difference between the two was, in 1877, about 2½ bushels on a produce of over 30 bushels. The difference in 1878 was nearly 5 bushels on a produce of under 17 bushels.

That, apart from irregularity, there should be a great reduction in produce by the second application of ammonia salts alone, or nitrate of soda alone, on this light land, might have been anticipated. But if this were due to exhaustion of minerals, the addition of a full mineral manure to the ammonia salts, and to the nitrate, should surely prove a remedy. But what is the result? In the second year, 1878, the ammonia salts and mineral manure together gave only 13 bushels, or 3½ bushels less than the ammonia salts alone, and the nitrate of soda and mineral manure gave 14 bushels, or little over 2 bushels more than the nitrate alone.

The foregoing results are those obtained with the smaller quantities of ammonia salts and nitrate of soda used. In the first year (1877) the addition to them of the mineral manure was practically without effect, excepting in a little increase of the straw, a result which was doubtless due to the relatively high mineral, as compared with the nitrogenous, condition of the soil. When, however, the quantities of ammonia salts and nitrate were doubled, there was a considerable increase of both corn and straw in the first season. There is also considerable increase in the second season, but under the following very curious conditions:—The mineral manure and single quantity of ammonia salts gave only 13 bushels, or less than the mean of the unmanured plots; whilst the mineral manure and the double quantity of ammonia salts gave 27 bushels, or an increase of 14 bushels over the single amount, the single amount giving no increase at all. In like manner whilst the mineral manure and the single amount of nitrate gave 14 bushels, the mineral manure and double amount of nitrate gave more than 26 bushels, or an increase over the single amount of more than 12 bushels, the single amount itself giving practically no increase at all. To put it in another way:—In 1877 the addition to the mineral manure of the single quantity of ammonia salts gave an increase of nearly 13½ bushels, and the addition of double the quantity gave an increase of 9½ bushels more, or in all an increase of about 23 bushels over the produce by the mineral manure alone. In 1878 the addition of the smaller quantity of ammonia salts to the minerals increased the produce by 2½ bushels, whilst the addition of twice the quantity raised it by 14 bushels more, or in all by 16½ bushels. Again, in 1878 the addition of the single amount of nitrate to minerals gave an increase of 3½ bushels over the minerals alone, and the addition of double the amount gave an increase of 12 bushels more. It need hardly be said that such a result as a less produce by the mixed mineral manure and the single quantity of ammonia salts or nitrate of soda than without manure, and an increase of from 12 to 14 bushels by the same mineral manure and double the quantity of ammonia salts or nitrate, is simply impossible if the experiments were properly conducted.

With regard to the result by farmyard manure, they are in both years very unsatisfactory. It is obvious that the application of insufficiently fermented dung to this very light land is inappropriate. The reason for applying the dung in a comparatively unfermented state was to ensure that there should be as little loss of nitrogen as possible, so that the difference in the amount of it, due to the difference in the amount in the different foods consumed, should be maintained. I see it is now proposed that the dung shall be well rotted before application, and that it shall be applied as a top-dressing. On this plan it is very probable that a portion of the nitrogen which remains will have been rendered more rapidly active, but at the cost of more or less loss; and it is to be hoped that the comparisons for which the experiments were instituted will not be defeated thereby.

Lastly, it may be noticed that the variations in weight per bushel, such as they were, were in 1877 consistent, whilst those in 1878 are quite inconsistent. On this point it may be

observed that whilst the extreme difference in weight per bushel among the various plots was in 1877 only a trifle over 2lb., it was in 1878 nearly 5½lb.

To sum up:—The results of 1877 exhibited some very marked features, and were, upon the whole, quite as consistent with each other as could be expected in the first year of such experiments, made upon land not previously cultivated with a view to them. In this corn-exhausted land purely mineral manures gave no increase of crop; but purely nitrogenous manures, whether in the form of ammonia salts or nitrate of soda, gave very considerable increase; and, consistently throughout, whether the nitrogenous manures were used alone or with mineral manure, or in the smaller or the larger amount, a given quantity of nitrogen applied as ammonia salts gave more produce than the same amount applied as nitrate of soda. There was not only more corn, but also more straw, and a higher weight per bushel, with the ammonia salts than with the nitrate; and when I was in the field, just before harvest, the superiority of the crop growing with the double amount of ammonia salts over that with the double amount of nitrate was very apparent, both in the ripeness of the grain and the colour of the straw. In the experiments on the Rothamsted soil, the superiority is, on the contrary, almost uniformly with the nitrate. To refer to another point, whilst the addition to the mineral manure of the smaller quantity of nitrogenous manure gave an increase of from 11½ to 13½ bushels of corn, the addition of double the quantity gave an increase of from 7 to 10 bushels more.

In 1878, on the other hand, there is, as has been shown, scarcely any connection traceable between the description and amount of manure employed and the amounts of produce yielded, and the greatest inconsistencies are among the plots deficiently or only moderately manured. The explanation of these inconsistencies is not far to seek. When I visited Stackyard Field on July 31, 1878, I made careful notes on the condition of every plot. It was quite obvious that on all the continuous wheat plots there had been, and was, a conflict between weeds and wheat, and that on all, excepting where the mineral manure and the double quantity of ammonia salts or nitrate had been applied, the weeds were victorious; whilst, on these two most highly-manured plots, the tallness and thickness of the crop had to a certain extent, kept them down. The continuous barley crops also suffered very greatly indeed.

Much as I regret that the second year's experiments on continuous corn growing at Woburn have been rendered worse than useless, I am not at all surprised at the result. Such experiments require attention to keep them clean which no practical farmer would think of bestowing on corn crops growing in ordinary rotation. In making these remarks, I wish emphatically to state that I do not attribute blame to anyone. The failure has been due simply to want of experience in the scientific conduct of field experiments. The experiments in question were last year carried out precisely on the plan which Mr. Randall proposed should be adopted in various localities, namely, that they should be conducted by practical farmers, inexperienced in exact experimenting, but under the direction, and more or less under the superintendence, of a scientific man residing at a distance. I gave my reasons at the time for disapproving of such a plan, and I am now entirely confirmed in the views I then expressed. Last year some were disposed to blame me for declining to have any further responsibility in the conduct of the experiments when they were to be carried out by a new and untrained resident manager; but I think they will now admit that I did not do so without reason. Dr. Voelcker has, I have no doubt, found the difficulties of superintending such experiments at a distance, with no other aid on the spot than that of a young practical farmer who had had no previous experience in accurate experimenting, to be very great; but from what I have seen of the present resident manager, I feel sure he will make good use in the future of the experience gained in the past year.

The Woburn experiments were established by the liberality of the Duke of Bedford, for the express purpose of determining accurately certain questions, and certainly not merely that an auxiliary farm of a little over 100 acres should be farmed as any farmer could farm it. But if the practical men in whose interests the experiments were instituted are

satisfied that the auxiliary farm should be farmed well, and that some of the main objects of the experiments themselves should be lost, who else has any right to complain?

Mr. Charles Howard has published in a contemporary the following letter in reply to the remarks made by Mr. J. B. Lawes.

Mr. Lawes, in his letter to you last week, drew attention to the results of 1873, as compared with those of 1877, on the experimental corn plots at Woburn. It is only due to the present manager that some explanation should be given. Mr. Lawes endeavours to fasten upon his management the failure of some of the wheat plots. In your criticisms also, you support this view.

Your readers should have their especial attention directed to this fact, that Mr. Lawes had the management of these plots until June 1, at which time every practical farmer knows that the various cleansing operations of the wheat crop should be completed. To do anything like hand-weeding—which would require men to stoop—after this time would only be injurious to the crops. If, therefore, as Mr. Lawes states, these operations had been thoroughly carried out, there would have been no weeds to complain of at harvest; if there were, the present manager is clearly not responsible, neither can he be answerable for the small yield of corn caused by the severe blight from which several of the plots suffered to a serious extent, much of the wheat not coming into ear. It was on these plots Mr. Lawes found the weeds—a legacy left on his retirement, more fully developed by the nourishment the wheat could no longer take up. Mr. Lawes has not thought it desirable to make any allusion to the mangel crop. In his eagerness to impart information, he should have stated by what superior management he obtained the astounding weight of 2 ton 1½ cwt. of roots to the acre in 1877, and in justice to the present management to have noticed that with the same manures three times the weight was obtained in 1878. From what I have seen of the experiments during the last two years, it surprises me there is so “much ado” about the necessity of an especial training for the work. A decently educated young fellow, with his head well put on and with a moderate experience in farm management, would find no difficulty in carrying out the instructions of his “scientific” chief.

Mr. Lawes will, I believe, find, on such light soil as that at Woburn, no matter by whom the experiments are conducted, that continuous corn crops cannot long be successfully grown, but that indications of this result are attributable to the present management I entirely deny.

I would remind Mr. Lawes, in conclusion, of an old and trite aphorism, “Let the saddle be put on the right horse.”

Mr. J. B. Lawes sends us the following letter in reply to Mr. Howard:—

In Mr. Charles Howard's reply to my comments on the results of the experiments on continuous corn growing at Woburn last year, which were published in your last impression, he calls the special attention of your readers to the fact that I had the management of the plots until June 1, at which time, he says, “every practical farmer knows that the various cleansing operations of the wheat crop should be completed.” He goes on to say that, if those operations had been thoroughly carried out, there would have been no weeds to complain of at harvest; and that if there were any they were a legacy left on my retirement.

As to the assertion that every practical farmer knows that the various cleansing operations of the wheat crop should be completed by the 1st of June. I had myself

said that “such experiments require attention to keep them clean which no practical farmer would think of bestowing on corn-crops growing in ordinary rotation.” Such special attention was given to the continuous corn crops at Woburn in 1877, long after the 1st of June. Such attention is every year bestowed on the continuous corn crops at Rothamsted; and if they had received no other care than every practical farmer would think of bestowing on corn crops growing in ordinary rotation—if, in fact, they had not been cleaned long after the 1st of June, some of them would have come to an untimely end a quarter of a century ago. I take it, however, that Mr. Howard's assertion of what every practical farmer knows is the proper course to adopt, is an admission of that which was really adopted after the experiments were given up on June 1—namely, to let the weeds alone.

Mr. Howard adds:—“Mr. Lawes will, I believe, find, on such light soil as that at Woburn no matter by whom the experiments are conducted, that continuous corn crops cannot long be successfully grown, but that indications of this result are attributable to the present management I entirely deny.” I quite agree that continuous corn crops cannot be successfully grown on such light soil as that at Woburn, as long as on the heavier one at Rothamsted. But, that the failure in 1878 was, as a matter of fact, due to the management, Mr. Howard's explanations can leave no doubt whatever; and from the authority with which he speaks, I suppose there can be as little, as to who was, at any rate largely, responsible. I have no hesitation in saying that if the cleansing operations of the continuous corn crops at Woburn are not continued long after the 1st of June, there will be the same failure in the future as there was last year, and that the experiments will die an unnatural death much sooner than, perhaps, even Mr. Howard supposes.

As, under the circumstances, a very curious commentary on the whole business, Mr. Howard further says:—“From what I have seen of the experiments during the last two years, it surprises me that there is so ‘much ado’ about the necessity of an especial training for the work.” Nothing that I could say, could more clearly illustrate the fallacy of his own conclusion on this point, or more strongly confirm the correctness of the contrary opinion which I had maintained on the subject, than his own candid enunciation of the rules which would guide “every practical farmer” in the management of such experiments, his admission of what was, or rather of what was not done, and the results themselves, which he does not deny.

**THE LOVES OF THE DWARFS.**—Those who have read the account of Miss Minnie Warren's two lovers, the successful General Tom Thumb and the disappointed Commodore Nutt, are aware that a little man can love long and devotedly. The astute Mr. Barnum thought that a marriage between the dwarfs would attract the public, and he made a great merit of not charging so much a head to those who wanted to witness the ceremony, feeling sure that the “good feeling” he displayed in the matter would pay in the long run—as it did. Commodore Nutt was consoled in course of time by another little Warren, and the two pairs of dwarfs became men and wives. There are, however, in America at the present time a couple of dwarfs, General Mite and Lucia Zvat, known as the Midgets, whose respective bosoms have not been struck by their companion's charms. This is a cause of trouble with their proprietor. He wants to arrange a marriage between them, but they deliberately refuse to fall in love with each other; and not only is the interest of a marriage thus rendered impossible, but there is a further difficulty that they may presently decline to appear together, and one may retire to a rival show. A little of Mr. John Wellington Wells's love philtre is the only thing I can suggest.—*Sporting and Dramatic News.*

# Agricultural Societies.

## AYRSHIRE.

The great show of the South-west of Scotland was held at Ayr, on April 30. The *Ayr Advertiser*, in commenting on the live stock, says:—The Ayrshire dairy stock have always had the prominent place at our shows. They attract the most attention, although in that respect the Clydesdales are coming up to them. The inspection began with the Derby class in which there was a great exhibition. Eighty-six animals were exhibited for the prizes, and the display, as a whole, was exceedingly good. There was some deficiency amongst the first five or six in comparison with recent years—notably with 1876—but a number of fine animals, not calving at the right time, might be seen far down the list. The prize of £14 for the best cow in milk was won by Mr. Duncan, Kilchattan, Bute, with a remarkably fine animal. Her milk-vessel is seldom equalled in a show-yard. The second cow was also very superior, but beyond that the onlookers around the ring—most of whom are very competent to form opinions—criticised the judges with more freedom than is usually taken at such times. The position of some of the leading animals in the Derby class had given rise to remarks which were repeated in one or two other classes. In the class of uncalved cows there is generally a good competition, and there was no falling off yesterday. The exhibition of milk stock was altogether very creditable. The bulls and young stock came under the eye of different judges. In the class of aged bulls, the Duke of Buccleuch's three-year-old attracted special attention. He had an easy victory over Mr. Keir's famous bull that has been so often at the top. As a class, the two-year-olds were better than the aged bulls, and the stirks, 52 in number, were a wonderfully good show. Amongst the queys, the Duke of Buccleuch's pair of two-year-olds were much admired; but the two-year-old quey from Auchtralure was by a long way the finest animal in that department, and the pair of quey stirks from the same farm might be put next to her.

The judges of Clydesdales had a great deal of first-rate stock to pass through their hands. In the class of brood mares the competition between Mr. Picken, Laigh Langside, Craigie, and Mr. Cunningham, Tarbreoch, Dalbeattie, was watched with keen anxiety. Mr. Picken was successful, and the spirit which he evinces is deserving of success. The prizes for yield mares were carried off by magnificent animals from different counties. The three-year-old and two-year-old fillies formed excellent classes, and comprised a great part of the finest young stock in Scotland. The colts were equally fine. Mr. Johnston's yearling colt attracted much attention. He was an easy winner. He has wonderful substance for his age, and his action is remarkably good. It takes all that to justify the price of 370 guineas given for him at Mr. Drew's sale. The Clydesdale horses at Ayr form a magnificent show, and are sufficient of themselves to attract multitudes of visitors. To the interested portion of the spectators the competition is an exciting game, as the splendid specimens of young stock are compared by skilful men for the first time this year. As a rule, their relative positions are pretty accurately determined for the season.

The display of hunters and roadsters was very large. In a hunting county like Ayrshire attention is naturally turned to that kind of stock, but good and skilful management on the whole is followed by more profitable results in the rearing of Clydesdales. With a wider diffusion of good stock, however, the profits of famous breeders are not likely to increase.

The show of fat stock was not extensive, but thoroughly finished animals were brought out. Mr. John Cunningham maintains his former prominent position as a feeder of Ayrshire cows, and Messrs. Bone, Shallochpark, are most successful with their yearlings.

The competitions in the different classes of black-faced sheep at Ayr have long been interesting, and they are becoming more extensive. This year our hardy hill flocks were exceedingly well represented. The Leicester sheep were specially good. The Association is mainly indebted for improvement in this department to Mr. Wallace, Anehebrain, who generally comes to the front when he moves at all. He carried everything before him yesterday with the Leicesters, and his success was equally complete and well-deserved in the various classes of pigs. Amongst the sheep the half-bred hogs made a fine exhibition. With them Mr. Wright, Dowhill, seems invincible.

The sums collected for admission at the entrances and at the stands, amounted to £894. Last year the amount was £1,002. There is thus a decrease of £108. But the show of last year was a wonderful success, in a pecuniary point of view. The largest sums collected in former years were £820 in 1877, and £737 in 1876. The comparison is thus very satisfactory.

## PRIZE LIST.

JUDGES.—AYRSHIRE DAIRY STOCK: Section I.—John Fleming, Strathaven; James Hamilton, Carnwath; David Fleming, Hamilton. Section II.—Hugh Kirkwood, Maryhill; George Crawford, East Kilbride; Robert McKean, Glasgow. HORSES: William Gray, Kirkcudbright; John Young, Paisley; William Findlay, Glasgow; Abram Kerr, Thornhill; James Calder, Dumbartonshire; Robert Finlay, Glasgow; Colonel Williamson, Perthshire; William Bird, Ayr; James Hope, Duddingston; George Stoddart, Newton Mearns. SHEEP: Archibald Coubrough, Campsie; Patrick Melrose, Peeblesshire; John Craig, Strathaven. SHORTHORN CATTLE, LEICESTER AND CROSSBRED SHEEP, FAT STOCK, AND PIGS: James Bruce, Annan; John McMillan, Dumfriesshire; Duncan McFarlane, Helensburgh. OLD CHEESE COMPETITION: Alexander Osborn, Glasgow. IMPLEMENTS AND MACHINERY: John Taylor, Ayr; David Scott, Govan; Robert Wallace, Ayr.

## CATTLE.

### AYRSHIRE BREED.

The Derby of April, 1879. Open to all comers.—Cows of the Ayrshire breed calved in 1870. Stake, £1 per head.—First prize, £21, Alex. Steele, Darvel (Juniper); second, £18, the Duke of Buccleuch (Favourite 3rd of Drumlanrig); third, £15, Hon. G. R. Vernon, Kilmarnock (Yellow Bear); fourth, £12, A. F. Fowlds, Stewarton (Brookie 2nd).

Aged cow in milk, and aged cow in calf on day of show. The following premiums were for those in milk.—First prize, £14, and the Highland Society's silver medal, James Duncan, Rothesay; second, £10, Wm. Craig, Dairy; third, £6, John Drewnau, Tarbolton; fourth, £2, Wm. Guthrie, Ayr. The following premiums were for those in calf.—First prize, £7, the Duke of Buccleuch; second, £4, Robert Allan, Glasgow; third, £1, the Duke of Buccleuch; fourth, the Duke of Buccleuch.

Three-year-old cow in milk, and three-year-old cow in calf on day of exhibition. The following premiums were for those in milk.—First, £5, Alex. Steele, Darvel; second, £4, the Duke of Buccleuch; third, £2, A. R. Fowlds, Stewarton; fourth, £1, John Nesbit, Newmilns. The following premiums were for those in calf.—First, £3, Hugh Wilson, Tarbolton; second, £2, the Duke of Buccleuch; third, £1, John Ritchie, Tarbolton; fourth, 10s., James Howie, Galston.

Lot of three cows in one dairy, three-year-old and upwards, the property of and bred by the exhibitor, in calf or in milk on day of exhibition.—First prize, £3, the Duke of Buccleuch; second, £4, William Anderson, Barnell, third, £2, James Howie, Burnhouse; fourth, £1, James Craig, Holmes of Caaf.

Premiums offered by the Earl of Eglinton and Winton. Pair of aged cows in milk, being the *bona fide* property of

the exhibitor.—First, £5, William Craig, Dalry; second, £3, James Howie, Burnhouses; third, £1, John Drennan, Tarbolton; fourth, Robert Lees, Tarbolton.

Pair of three-year-old cows, in calf or in milk on day of exhibition, bring the *bona fide* property of the exhibitor.—First prize, £5, A. Steele, Burnhead; second, £2, W. Anderson, Barneil; third, James Howie, Burnhouses.

Aged bull, above two and not exceeding eight years.—First prize, £8 and the Highland Society's medium silver medal, the Duke of Buccleuch, Drumlanrig; second, £3, Duncan Keir, Bucklyvie, Stirling; third, £1, Thomas Muir, Bowhouse, Carmichael, Thankerton; fourth, William Boyd, Bougang, Colmonell.

Two-year-old bull.—First prize, £9, Patrick Coul, Wattieston, Kilbirnie; second, £8, James Howie; third, £3, James Gilmour, Cumnock; fourth, £1, Peter Clark, Campbeltown; fifth, James Wilson, Mackerquhat, Colmonell.

Bull stirk.—First prize, £8, Robert Meikle, Tarbolton; third, £3, W. Brown, Kilwinning; fourth, £2, W. Boyd, Colmonell; fifth, £1, Thomas Donald, Newmilns; sixth, 10s., John Sloan, Ochiltree; seventh, David Gray, Tarbolton.

Pair of two-year-old queys, neither in calf nor in milk.—First prize, £5, the Duke of Buccleuch; second, £3, John Barbour, Girvan; third, £1, James Hood, Coyton; fourth, John Murray, Ochiltree.

Single two-year-old quey, neither in calf nor in milk.—First prize, £5, heirs of William McDowall, Stranraer; second, £3, the Duke of Buccleuch; third, £2, James Caldwell, West Kilbride; fourth, £1, the Duke of Buccleuch; fifth, J. Murray.

Pair of quey storks.—First prize, £3, heirs of William McKowall; second, £2, Matthew Templeton, Colmonell; third, £1, the Duke of Buccleuch; fourth, John McCartney, Stair.

Single quey stirk.—First prize, £3, James Gilmour; second, £2, James Gilmour, Orchardton; third, £1, John Barbour, Girvan; fourth, the Duke of Buccleuch.

Sweepstake competition. Open to members wherever resident. Ayrshire cow in milk or calf, on day of show, of any age (stake 10s.).—First prize, two-thirds of the stakes, and the Society's gold medal, or £5 in option of winner, the Duke of Buccleuch; second, one-third of the stakes, and the Society's silver medal, James Duncan, Rothsay; third, silver medal, the Duke of Buccleuch; fourth, the Duke of Buccleuch.

Parish sweepstake competition. Open to members wherever resident. Five cows, Ayrshire breed, any age (stake 10s.).—First prize, whole of the stakes, the Duke of Buccleuch; second, silver medal, William Anderson Barneil; third, the Duke of Buccleuch.

#### SHORT-HORNED BREED.

Bull under five years old.—First prize, £3, W. and J. Bone, Girvan; second, £1, R. F. F. Campbell, of Craigie.

#### YAT STOCK.

Three-year-old ox or heifer, pure or cross.—First prize, £5, W. Underwood, Maybole; second, £3, R. Jack, Girvan; third, R. Jack.

Two-year-old ox or heifer, pure or cross.—First prize, £5, A. and J. M. Hannah, Girvan; second, £3, R. F. F. Campbell, of Craigie; third, J. G. Ramsbottom, Maybole.

Fat cow, of any age, of the Ayrshire breed.—First prize, £4, J. Cunningham, Maybole; second, £2, J. Bone, Girvan; third, J. Cunningham, Trees.

Two-year-old ox or heifer of the Ayrshire breed.—First prize, £4, R. Cadzow, Thankerton; second, £2, R. Latta, Ayr; third, W. Kay, Mossend, by Ayr.

Pair of one-year-old bullocks or heifers, pure or cross, intended for feeding purposes, and bred by the exhibitor.—First prize, £2, W. and J. Bone, Shalloch Park; second, £1, W. and J. Bone; third, R. F. F. Campbell.

#### HORSES.

Brood mare for agricultural purposes, in foal, or having had a foal in the season of 1879.—First prize, £10, and the Highland Society's medium silver medal, J. Picken, Craigie; second, £7, J. Cunningham, Dalbeattie; third, £3, A. Allan, Dalry; fourth, £1, W. Crawford, Dalry; fifth, J. Greig, Campbeltown.

Yield mare for agricultural purposes, four-years-old and upwards.—First prize, £4, A. Montgomerie, Castle Douglas; second, £2, Earl of Dunmore; third, £1, D. Riddell, Paisley; fourth, J. Harvie, Mearns.

Three year-old mare for agricultural purposes.—First prize, £5, D. Riddell; second, £3, J. Hunter, Strathbungo; third, £2, J. Cunningham, Dalbeattie; fourth, J. Dunlop, West Kilbride; fifth, W. Park, Bishopston.

Two-year-old filly for agricultural purposes.—First prize, £7, A. Montgomerie; second, £5, R. Pollock, Newton Mearns; third, £3, A. Rankin, Stranraer; fourth, D. Riddell, Paisley.

One-year-old filly.—First prize, £4, J. Ross, Dunlop; second, £2, D. Cross, Maybole; third, £1, J. Brown, Kilwinning; fourth, J. McMaster, Stranraer.

Sweepstakes competition (open to members wherever resident), pairs of agricultural mares or geldings; stake, ten shillings for each entry of two animals.—First prize, two-thirds of the stakes, and £1 10s., D. Riddell; second, one-third of the stakes, and £1, J. Cunningham, Dalbeattie; third, silver medal, J. Harvey, Mearns; fourth, M. Henderson, Ardrossan.

Gelding for agricultural purposes, four-years old and upwards.—First prize, £3, A. Aitkenhead, Pollockhays; second, £2, C. Campbell, Glasgow; third, £1, Duke of Portland, Troon; fourth, W. Clark, Newton Mearns.

Three-year-old gelding for agricultural purposes.—First prize, £3, J. Templeton, Patna; second, £3, R. F. F. Campbell; third, £1, A. W. Taylor, Galator; fourth, J. Dunlop, West Kilbride.

Two-year-old gelding for agricultural purposes.—First prize, £2, W. Spiers, Craigie; second, £1, H. Miller, Newmilns; third, A. W. Taylor.

Two-year-old entire colt.—First prize, £10, and the Highland Society's medium silver medal, D. Riddell; second, £5, R. Pollock; third, £2, Earl of Dunmore; fourth, T. Lindsay, Craigie.

One-year-old entire colt.—First prize, £5, J. Johnston, Maryhill; second, £3, D. Cross of Knockdon; third, £1, D. Riddell; fourth, J. Hunter, Strathbungo.

Sweepstake competition. Open to members wherever resident. Pony, exceeding 12½, and not exceeding 14½ hands, Stake, 10s.—First prize, two-thirds of the stakes, W. Forrest, Muirkirk; second, one-third of the stakes, A. Gemmell, Ayr; third, silver medal, W. H. Houldsworth, of Goodham; fourth, A. Cochran, Montgomerie.

Sweepstake competition, not limited to members. Pony, not exceeding 12½ hands. Stake, 10s.—First prize, two-thirds of the stakes, J. Johnston, Lochburnie; second, one-third of the stakes, J. Dunlop, Kilmarnock; third, silver medal, A. Gemmell, Ayr; fourth, J. McMaster, Dalblair R. A.

Sweepstake competition. Open to members wherever resident. Saddle horse (mare or gelding). Stake, 10s.—First prize, two-thirds of the stakes, A. Finnie, Kilmarnock; second, one-third of the stakes, Captain S. Monie, Ayr; third, silver medal, A. H. Houldsworth, Lasswade; fourth, A. H. Houldsworth.

#### PREMIUMS OFFERED BY GENTLEMEN HUNTING IN AYRSHIRE, AND OTHERS.

Yearling colt or filly, likely to make a good hunter (and got by a thoroughbred horse), having been the property of the exhibitor from the 1st January, 1879, to the date of competition.—First prize, £5, J. Taylor, Ayr; second, £2, G. Hart, Ayr; third, £1, M. Shedden, Dalry; fourth, T. Andrews, Monkton.

Two-year-old colt or filly, likely to make a good hunter, &c., as in Class 15.—First prize, £5, T. Andrews, Monkton; second, £2, R. Kerr, Portpatrick; third, £1, W. McKerron, Ayr; fourth, G. Young, Kilmarnock.

Three-year-old colt or filly, likely to make a good hunter, &c., as in Class 15.—First prize, £5, W. McKerron, Ayr; second, £2, J. Hutchinson, Newarkhill; third, £1, K. Williams, The Green; fourth, W. Imrie, by Castle Douglas.

Three-year-old colt or filly, got by a thoroughbred horse, and bred by a farmer.—First prize, £10, W. McKerron; second, £4, J. Hutchinson; third, £2, K. Williams; fourth, £1, W. Imrie; fifth, M. Taylor, Kilmarnock.

Colt or filly having the qualities of a good hunter. Four years old and upwards, &c., as in Class 15.—First prize, £5, A. Gemmell, Ayr Arms; second, £4, Hon. G. R. Vernon; third, £2, J. Jamieson, Edinburgh; fourth, £1, A. Gemmell; fifth, A. H. Houldsworth.

Mares capable of producing first-class hunters or saddle

Horses.—First prize, £10, R. Williams, Wislaw; second, £5, R. A. Oswald, o' Auchenruive; third, £3, J. Eccles, Ayr; fourth, £1, W. M'O. Campbell, Fairfield House, Monkton; fifth, A. W. Taylor, Galston.

Weight-carrying hunter, suited to carry about 14 or 15 stone. Open to all comers, and no entry money.—First prize, £10, W. Baird, Ayr; second, £5, W. Baird; third, £3, A. G-mnell; fourth, £1, W. M'Kerrow, Ayr; fifth, G. Steele, Ayr.

Light weight hunter, suited to carry about 11½ stones.—First prize, £10, H. F. Boyd; second, £5, William M'Kerrow, Ayr; third, £3, H. F. Boyd; fourth, £1, H. T. Tennant, Ayr.

Weight-carrying or light-weight hunter. The prizes to be awarded to the best jumpers. Competition open to all comers.—First prize, £10, James Walker, Ayr; second, £5, William M'Kerrow, Ayr; third, £3, John Rutherford, Annan; fourth, £3, William Stewart, Ayr.

## SHEEP.

## BLACKFACED.

Aged tup.—First prize, £5; and to the shepherd, 5s., William Maxwell, Campbelltown; second, £3, Francis Thomson, Glenback; third, £1, James Craik, of Craigharroch, Monkton Hill, Breckwick; fourth, James Craig, of Craigharroch.

Two-year-old tup.—First prize, £3, and to the shepherd, 5s., J. and J. Moffatt, Sanquhar; second, £2, Wm. Maxwell, Campbelltown; third, J. and J. Moffatt.

Tup Hog.—First prize, £3, and to the shepherd, 5s., J. and J. Moffatt, Gateside, Sanquhar; second, £2, J. and J. Moffatt; third, the Earl of Stair.

Pen of five ewe hoggs.—First prize, £3, and to the shepherd, 5s., the Earl of Stair; second, £1, James Allan, junr., Brodwick; third, George Warnock, Leamshagow.

## CHEVIOTS.

Aged tup.—First (£2) and second prize, D. C. Willison, Dalgarroch.

Two-year-old tup.—First (£2) and second prize, D. C. Willison.

Tup hog.—First prize, £2, John Lawrie, Shieldhill; second, D. C. Willison.

## LEICESTERS.

Tup, two-year-old and upwards.—First prize, £3, Robert Wallace, Mauchline; second, £2, John M'Ilwraith, Ayr; third, William Todd, Stranraer.

Tup, one-year-old.—First prize, £3, Robert Wallace, Auchebraun; second, £2, Robert Wallace; third, £1, Robert Wallace.

Two ewes, not exceeding five years old, with their lambs.—First prize, £2, Robert Wallace; second, £1, Robert Wallace.

## CROSSES.

Pen of five wedder or ewe hoggs, a cross betwixt the Cheviot and Leicester.—First prize, £4, Bryce Wright, Girvan; second, £2, Bryce Wright; third, David Cross, of Knockdon.

Pen of five wedder or ewe hoggs, a cross betwixt the black-faced and Leicester.—First prize, £4, John M'Ilwraith, Drumshanz; second, John M'Ilwraith; third, John Lawrie, Shieldhill.

Pen of five wedder or ewe hoggs, of any cross.—Prize, £2, Bryce Wright, Dowhill.

## PIGS.

Boar of any breed.—First prize, £4, Robert Wallace, Mauchline; second, £2, R. F. E. Campbell, of Craigie.

Breeding sow of any large breed, in pig, or not in pig.—First prize, £4, Robert Wallace, Auchebraun; second, £2, R. F. E. Campbell, of Craigie.

Breeding sow of any large breed, with her pigs receiving her milk at the time of competition.—First prize, £4, Robert Wallace, Auchebraun; second, £2, Robert Lees, Tarbolton.

Breeding sow of any small breed, in pig, or with her pigs receiving her milk at the time of competition.—First prize, £5, Robert Wallace, Auchebraun; second, £3, Robert Wallace; third, James Mair, Townhead, of Drumley, Tarbolton.

## BATH AND WEST OF ENGLAND:

At the Council Meeting held April 29th, 1879, at the Grand Hotel, Bristol, the chair was taken by Sir T. D. Acland, Bart., M.P., in the unavoidable absence of the President.

## FINANCE.

Mr. CHARLES EDWARDS, as chairman of the Finance Committee, brought up the quarterly statement of accounts and payments to the amount of £1,803 5s. 6d. were sanctioned by the Council. Authority was also granted to the chairman to draw all necessary cheques in reference to the Exeter Meeting.

## EXETER MEETING.

The Draft programme for the Exeter meeting, on June 2nd, 3rd, 4th, 5th, and 6th, was approved, the times of opening and closing the yard being fixed, as usual, for 9 a.m. and 6 p.m. respectively.

## REFRESHMENT CONTRACT.

Colonel LUTTRELL, as chairman of the Contracts Committee, reported the acceptance by the Committee, subject to approval by the Council, of tenders for the supply of refreshments in the show yard at Exeter by the following persons:

Nos. I and VI.—Mr. S. L. Gifford, 253, High Street, Exeter.

Nos. II. and IV.—Mr. John Hooper, 23, New Cross Road, London, S.E.

Nos. III. and V.—Mr. John Hitchcock, 86, Old Market Street, Bristol.

## ARTS DEPARTMENT.

The Arts Committee reported that the grant of the Council for lace prizes had been augmented by donations of £5 each from J. C. Moore Stevens, Esq., and Horace Marryat, Esq., and the following list of prizes for Honiton lace was presented:—For the best lappet, £5; for the best trimming lace for body and sleeves, £5; for the best necktie, £3, second prize, £2; for the best 12 birds (in one frame), £3, second prize, £2; for the best 12 butterflies (in one frame), £3, second prize, £2; for the best yard and half of trolley lace, £3, second prize, £2. It was also reported that arrangements had been made for holding a loan collection of Works of Art in connection with the Society's Exhibition, and that several influential patrons of art in the county of Devon had kindly promised their active support to this Department.

## COUNCIL.

The list of members of Council to be recommended to the annual meeting for election for the term of 2 years next ensuing was settled.

## WORCESTER MEETING, 1880.

Colonel LUTTRELL on behalf of the deputation appointed to visit Worcester, reported that the deputation were most cordially received by the inhabitants of Worcester; that an admirable site for the show yard and trial fields had been inspected and approved; and that the Society's requirements had been signed by the Mayor of Worcester on behalf of the Local Committee and citizens.

## THE LATE MR. H. ST. JOHN MAULE.

Sir T. D. Acland, Bart., in eloquent and feeling terms alluded to the loss sustained by the Council in the recent death of Mr. H. St. John Maule, and moved the following resolution which was adopted by the Council:—

"That the Council desire to express to Mrs. H. St. John Maule and the other members of the family of the late H. St. John Maule, Esq., their sincere sympathy with them in their bereavement, and their grateful recollections of the services rendered by Mr. St. John Maule to this Society in the extension which took place in 1850-51, and in its subsequent operations during many years."

The following new members were elected:—Governors: Mr. E. C. Baring, Mambland House, Iybridge, Devon; Mr. H. B. Midmay, Flete House, Iybridge, Devon. Members: Mr. W. L. Martin, Lee Moor China Clay Works, Plympton St. Mary; Mr. R. Mattock, Sowton House, Wellington, Somerset.

## BIRMINGHAM.

The first meeting of the new Council was held on May 1st at Birmingham, the Mayor in the chair.

Earl Howe was elected president, and the Mayor and Lord Chesham were added to the list of vice-presidents. Mr. John Lowe was re-elected hon. treasurer. The General Purposes, Shorthorn Finance, Sub-letting, Poultry, Stand Allotment, and Printing and Advertising Committees were appointed; also a new committee to consider the desirability of continuing the exhibition of agricultural horses, with instructions to



confer with the various agricultural societies in the Midlands on the subject, and to report. Mr. T. F. Chestle, of Dosthill, near Tamworth, was elected on the Council in room of Mr. T. Lloyd.

The prize list was revised. A limit of 4½ years was put to the age at which oxen can be shown, the three classes for the principal breeds being—(1) for steers under thirty months old, (2) for steers over thirty months and under forty-two months, (3) for steers and oxen over forty-two months and under fifty-four months. There were a few minor alterations in classes for sheep. New classes were opened to admit Welsh, Norfolk, and Suffolk polled cattle, the Sussex breed and Channel Island cattle; and the regulations were amended to prevent the winners of the Challenge Cup or £100 prizes coming a second year to compete for these prizes. Mr. Geo. Wise offers a £5 5s. cup for the best eight varieties, of twelve tubers each, of potatoes, to include "Magnum Bonum;" and Mr. McKinlay 30s., 20s., and 10s. for the best dish of white and the best dish of coloured potatoes.

The report of the Poultry Committee recommended a number of changes, the most important of which we have already alluded to. The committee also suggested that 42s. should be the maximum price allowed in the selling class, instead of 40s. The report was adopted.

Communications have been received from the Mayor of Birmingham (Ald. Collings), offering a prize of £10 10s. for the best Devon steer under three years old; from the linen and woollen drapers of Birmingham offering four special prizes of £10 each for sheep at the next Christmas exhibition; from Mr. Newdegate, M.P., offering a £10 10s. prize for best Longhorn in the hall; from Mr. Bromley-Davenport, M.P. offering a similar amount for the best Shorthorn; from Messrs. Sutton and Sons, offering fifteen guineas, in three prizes, for roots; from Messrs. Proctor and Ryland, offering eleven guineas; Messrs. Carter and Co., ten guineas; Messrs. Webb and Son, ten guineas; Mr. Outley, medalist, five guineas; Messrs. Billing, Son, and Co., thirteen guineas; Messrs. Maplebeck and Lowe, five guineas; Mr. W. C. B. Cave, five guineas; Messrs. Morris and Griffin, six guineas; Mr. G. C. Adkins, £5; Spratt's Patent Food Company, ten guineas; Mr. Peter McKinlay, three guineas.

The date of the next show will be November 29th, and December 1st, 2nd, 3rd, and 4th. Entries close for implements on October 18th, and for stock and poultry on November 1st.

## Chambers of Agriculture.

### BANBURY DISTRICT.

A meeting of this Chamber of Agriculture was held on May 1. Mr. J. Loveday was elected Chairman in place of Mr. Rusey, resigned.

After a discussion on the County Boards Bill, Mr. WESTOVER moved the following resolutions:—"That in the opinion of this Chamber the County Boards Bill (as introduced by Government) is calculated to increase the burdens of the ratepayers without affording any corresponding relief.

"That no proposal for a county authority can be acceptable to ratepayers that does not furnish that authority with an extension of the power, given in the Highways Act of 1878, in respect to locomotives, to issue graded licenses for all vehicles used on main roads, so that those who wear the roads may bear a share of the cost of their repair.

"That a general county road fund be established into which the tax on light carriages, as at present collected, might legitimately be paid; the proceeds also from all licenses on locomotives and heavy vehicles, and all fines, &c., for breaches of road bye-laws, should be applied as part of such county road fund."

Mr. THURBY seconded the resolutions, which were carried.

Mr. THURBY then read a paper on "The Depression in Agriculture," and concluded by moving:—"That in the opinion of this Chamber, the present depression of agriculture has been caused by a course of bad seasons, heavy importations of corn and cattle, increased burdens on land, the high price of labour, and that it would be well to press on the

Government to institute a Royal Commission or Committee to inquire into the present depression of trade and agriculture, and see if the policy of free trade is to the benefit of the country."

Mr. SCRIVEN, in seconding the resolution, said he did not think, with their population, that it was possible to go back to protection. Although they had free trade principles in operation no other country was adopting them to any great extent. He thought free trade was very much like the handle of a jug, all on one side (laughter)—but although countries with meagre populations might adopt protection, he did not think we could. He thought that corn was at such a low price they might have a nominal duty of threepence a hundredweight on all foreign corn, which no one would feel, and which they might get towards the maintenance of the roads. Mr. Thurbay had alluded to their representation in Parliament, and he (Mr. Scriven) thought it would be a very good thing if they sent more members to Parliament to represent the tenant farmers' interest. So far as he could see, they sent landlords, and they, of course, saw to their own interests. It was estimated that the landlord's capital in the land was 2,000 millions, and the tenants' capital 400 millions (which he believed to be over estimated; Lord Beaconsfield had, however, put it 300 millions), and yet they had only three or four representatives in the House and he looked upon Mr. Pell as more a landlords' representative than a tenants'. But then a very important question was, where could they find tenant farmers who could afford to go to Parliament? In Warwickshire they had started a Tenant Farmers' Association, and one of their main objects was to send a tenant farmer to represent them. He only trusted he could see this matter take root in Oxfordshire and other districts. They often sent the sons of noblemen to the House of Commons, somewhat as apprentices, before taking the higher duties which devolved upon them in the House of Lords. Some years ago they sent Lord Spencer for South Northamptonshire, and lately they sent Lord Burleigh, who was very ignorant upon some things, who did not know what a county board was, and who had never heard of the Permissive Bill. (Laughter.) In conclusion, Mr. Scriven said there was no doubt protection would assist them, but Mr. Read had said protection was as dead as Queen Anne—(laughter)—and Lord Jersey at Oxford said that reciprocity was simply protection in a fancy dress. From what Lord Beaconsfield and other leaders of their party said it was very little use going in for protection. The only thing that would give them relief would be considerably lower rents, and this could only be brought about by the inexorable law of supply and demand.

Mr. WESTOVER, replying to a remark in the paper, said that the farmer spent as many hours looking after his farm as the shopkeeper did in his shop, and he worked more hours than the labourer.

Mr. G. LOVEDAY asked if it would be worth while to use in the resolutions the words "one-sided" free trade?

Mr. SCRIVEN—It is one-sided certainly.

Mr. LOVEDAY—Is it worth while to inquire into free trade if protection is perfectly dead?

Mr. GOLBY—I think the resolution should stand as it is. It may probably have no effect upon Lord Beaconsfield at present, but it may some other time. (Laughter.)

Mr. SCRIVEN—It may "educate" him. (Renewed laughter.)

Mr. T. GARRETT said there was not the slightest chance of going back to protection, and he did not think the last clause of the resolution should stand.

Mr. LOVEDAY moved, and Mr. GARRETT seconded, that the clause relating to the inquiry about free trade be omitted from the resolution.

Mr. DENCHFIELD suggested they leave out the words "one-sided."

Mr. ANKER seconded.

Mr. THURBY said he would take "one-sided" out.

On Mr. Loveday's proposition being put to the meeting it was lost by a large majority, and the resolution carried.

The SECRETARY read a letter he had received from the Central Chamber with regard to agricultural classes at South Kensington.

The CHAIRMAN proposed a vote of thanks to Mr. Thurbay for his paper, which was seconded by Mr. WESTOVER, and agreed to.

After the meeting, a number of the members of the Chamber assembled for the purpose of presenting a testimonial to Mr. E. Scriven, as an acknowledgment of the manner in which he had discharged the duties of honorary secretary of the Chamber.

### CIRENCESTER.

This Chamber at its monthly meeting on April 28th, brought to a close a protracted debate, commenced at the previous monthly meeting, on the proposition, "Is our free-trade policy responsible for our present agricultural and commercial depression?" At the meeting on Monday last, Mr. J. Snowsell moved, "That in the opinion of this Chamber the time has arrived when the Legislature should seriously consider the causes of the present agricultural, manufacturing, and commercial depression, and especially whether that depression is attributable to our free trade policy; and that in the event of any return to import duties it would be just and expedient to extend the same to agricultural produce." This was a modification of a resolution previously introduced by the same member. Mr. H. Buck moved, as an amendment, "That to place the British farmer on a more even competition with the foreigner in growing wheat, and as a preventative of much land going out of cultivation, this Chamber thinks that when wheat is under an average of 56s. per quarter in this country a fixed duty of 8s. per quarter should be placed on all importations of foreign wheat, and equivalent to such on all flour." After an animated discussion the original resolution proposed by Mr. Snowsell at a former meeting was carried.

### GLOUCESTERSHIRE.

The monthly meeting of this body was held on April 19th, at Gloucester, the president (Mr. W. Friday) in the chair.

A discussion took place on "The Causes of Agricultural Depression."

Captain DE WINTON, J.P., proposed:—

"That in the opinion of this Chamber the present depression of agriculture—principally caused by four bad seasons, severe competition, and increased burdens on the land—can only be successfully met by the judicious employment of such increased capital, both by landlords and tenants, as shall stimulate the land to its highest producing power of corn, meat, and dairy produce; and that for this desirable end the attention of Parliament should be directed to the necessity of doing away with the law of entail, as also of taking the necessary steps towards rendering the sale and transfer of land more simple and less expensive and dilatory than at present."

He thought there was no doubt agriculturists were suffering under very great depression, and he could not see a present prospect of any great alleviation. When farmers of America could deliver wheat into the market at Liverpool under 5s. a bushel, he could hardly see, with present burdens on the land, how English farmers could grow corn to a profit. It might be said there were other means of gaining a profit, that they might lay their land out for feeding grass, and buy store stock from America. He had heard they could buy a good bullock in Texas or some of the Western States for £1. He presumed the cost of conveying it to an Eastern port in the United States would be £1; the freight to Liverpool would be about £1, and the beast could be delivered at Gloucester market at a total cost of £10. Converting heavy plough land into grass would be very expensive, as it would take many years to produce good feeding grass. A tenant could not be expected to do it, and he therefore said he would encourage the introduction of more capital in farms. The law of entail was one of the greatest causes of the landlord not putting more capital on his land. By it the dead hand stopped the living hand from using capital to make a farm more paying. If his land had been thus entailed what could he possibly have done, with a family of ten children? Knowing that the land would go to his eldest son, it would have been his duty to save every penny he could to give his other children a start in life, and would not have had a single farthing to spend on drainage, buildings, or other agricultural improvements. He was as fond of farming as any man in England, and if he were beginning life *de novo* would engage in it, but

not unless he could put £30 on every acre he held. With that he thought he could even now make farming pay. Captain de Winton quoted Mr. J. S. Mill's view of what rent should be, and illustrated it by the following figures, without pledging himself to the accuracy of the estimate:—He used a capital of £20 per acre. He put the working outlay upon an acre of corn land (he was not dealing with the rotation) at £5; labour, at £1 10s.; rates and taxes, at 10s.; interest on capital at 10 per cent., £2; total, £7. He put the produce at 40 bushels of wheat at 5s. per bushel, £10; surplus, £3, which he called rent. If, instead of the 40 bushels, the return was only 28, he would maintain that the person using the £20 per acre should pay no rent at all. But unless land were thoroughly well drained, and with good buildings and roads, a landlord would not get a tenant to employ a capital of £20 an acre. He thought the holding of English land a matter of very great responsibility. He believed the community had a right to ask owners whether they were using it for the benefit of the public. No doubt there were bad landlords and bad tenants, and it would always be so. His definition of a good landlord was one who would the least make a tenant feel he was not farming his own land, and of a good tenant, one who farmed the land as if it were his own. He wished half-a-dozen good landlords and as many good tenants would meet in every county and discuss (1) how to make the law of distraint less injurious to the tenant, whilst it secured to the landlord the payment of his rent; and (2) how to give the tenant full power of using his land and selling his produce exactly as he pleases, without interference by his landlord, and, at the same time, without his farm being deteriorated.

Mr. G. A. Dymock said he would second the resolution for the sake of promoting discussion.

Some other members having spoken, the discussion was adjourned.

The meeting then proceeded to consider the Rivers Conservancy Bill.

Mr. LONG complained first of uplands having to contribute to the cost which would be incurred, and secondly, of tenants having to pay such rating at all. He moved:—

"That in the opinion of this Chamber all rates for the conservancy of rivers should be paid by owners of land.

Four voted for and four against.

The President declined to vote, and declared the subject adjourned.

### STAFFORDSHIRE.

A general meeting of the members of the Staffordshire Chamber of Agriculture was held on April 19, at Stafford, Mr. R. W. Hanbury, M.P., (president) in the chair.

Mr. T. NAVILLE (Lichfield) introduced a discussion on the general incidence of local taxation, and moved:—

"That in the opinion of this Chamber it is manifestly unjust that the large sum now required for local rates should be raised from one class of property only; that in addition to the cost of the maintenance of the poor, new charges have been thrown upon the local rates, such as education, turnpike roads, police, and also the large sums required in some districts for sanitary purposes; that this Chamber again asserts that no arrangement can be deemed a satisfactory settlement of this question that does not so amend the basis of assessment as to make all classes of income bear a fair proportion of local burden."

Mr. JOHN DARLINGTON seconded the resolution.

The Rev. E. C. PERRY (Sleightford) was of opinion that the resolution was not sufficiently general in its character—that the heads of members of Parliament ought to be entirely unfettered in dealing with the question—and he therefore moved as an amendment:—

"That the incidence of taxation imperatively demands the early attention of Parliament; and that no settlement of the question can be satisfactory which does not embrace funded and other property, as well as land and houses, as a basis of taxation."

The amendment was seconded by Mr. W. SAMPSON (Gnosall), but on a division it was negatived by 11 to 7.

Mr. B. H. MARLEN (Pendeford) thereupon moved, and Mr. C. R. KEELING (Congreve) seconded, a rider, to the effect:—

"That in order to secure the efficient and economical administration of local rates, it is desirable to provide for their payment in equal parts by owners and occupiers."

This proposal was defeated by a considerable majority, and the resolution as originally moved was adopted.

The CHAIRMAN opened a discussion on the bill introduced by the Government for the establishment of County Boards. This bill, he remarked, not only differed in title from the bill which Mr. Selater-Rooth introduced last year, and under which it was proposed to carry on the whole administrative work of the country, with the exception of police, but as a matter of fact it was not a bill for governing the county in any sense at all.

On the motion of the Rev. E. C. PEMBY, seconded by Mr. T. NEVILLE, it was unanimously resolved:—

That the partition among two governing bodies of the administrative duties connected with one and the same county area is unsound in principle and calculated to impair the efficiency of both such bodies, and that the County Boards Bill now before the House of Commons is unsatisfactory and ought not to be passed into law.

## SUNDERLAND.

The general quarterly meeting of the Sunderland Chamber of Agriculture was held on Saturday, April 19. In the absence of the president (Mr. R. L. Pemberton) through indisposition, Mr. Geo. Dawson occupied the chair.

Mr. GEORGE BURNES of Washington read a paper on "The Mechanism of Agriculture." He said:—

Some apology is due from me in venturing to appear before you, but the kind and flattering manner in which I have been invited overpowered more prudential considerations. The application of power to the cultivation of the soil is one thing, and an inquiry into the source of that power—whether steam power, horse power, or manual labour—is another. It must also be borne in mind that there is an element to be taken into account that differences the application of machinery to agriculture to that of nearly every other industry. Compared with the mill or the forge—you take the cotton and corn to the mill, the iron to the forge; but you cannot take the land to the machine. The machine must go to the land; so we have here an additional element of difficulty in the application of machinery, hill and vale, bog land and clay, however they may and to the beauty of the landscape, tax the invention of the engineer. He built a locomotive in the early days of his apprenticeship, but the problem of the land has been hitherto more than a match for all his matured skill. The size of the field, the shape, and even the position, are all matters for the consideration, and interfere more or less with economical working, as we steadily work to the end of reducing friction and economising power. As an illustration: Suppose you have uneven land, and you cultivate by steam, you will find it best to cultivate from hill to hill, for your power being transmitted by means of rope. If your engines and windlasses were in the valleys, the rope passing over the hills would scour away, and the friction would increase the draught also. Another very serious drawback is the short time in the year that any machinery is needed. The mowing machines are brought out, and after a few days' activity are put away for another season. Corn harvesting machines we scarcely require a month. Preparing for wheat, and sowing, and applying manures require a different class of implements; and when we consider that some machines, take for instance the steam thrashing machine, will scarcely pay interest on its purchase for any individual farmer's use, another element of difficulty is added. The division of labour is difficult even at the first. The use of the steam plough, the steam thrashing machine, and corn drill by a class of men who make them their main occupation (thereby gain more facility in the management of those implements), and are more varied in their resources in case of difficulty) comprises the chief attempts that have been made with much success in this direction. The element of traction that the farmer has to take into consideration is an important one; it includes not only roads, but the land he has to travel over also. His implements or machinery are necessarily less complex, as the conditions under which they have to work are more difficult. One of the first conditions therefore, I should say, is to have good roads, either for steam or horse power, and more of them; although I should be sorry to make a road where I might have land instead; yet to use land for a road one year, and smash it up to sow a crop the next, and so on alternately, I should say, is very poor economy. We want roads to the further portions of our farms, and so good that they will carry in all weathers. The horse is not calcu-

lated to pull a load when the cart wheels are up to the axle. With a good road you do away to a great extent with one element of uncertainty and stoppage. You may do a certain class of cartage in any weather. Roads ought to be straight also, as the evenness of the ground will permit; it shortens the distance. You may think this statement of mine unnecessary, but from Washington to Penzance (2½ miles as the crow flies), you will drive 10 miles to reach it, as there is no public bridge over the Wear at this day from Sunderland to Chester Bridge. From Washington to Newcastle you go considerably out of your way in order that you may get over some hills. The way to Jarrow shows no endeavour to shorten a straight line. From Marston Rocks to South Shields the roads are something ridiculous. We are afraid of the foreigner, and think we shall be beat; we are beaten. From the Arc de Triomphe in Paris you see the rous pass into the city in straight lines, and away from the city is straight lines into the country, and it would appear that they know better than we the value of good roads for developing the resources of the country. The Americans plan out their roads after survey and before they settle on the land; but the reason for which many of our roads were formed are lost to a great extent; they at any rate require re-arranging as population shifts. It is too soon, perhaps, to speculate on the possibility of tramways for connection between towns and country for farm produce and manures, the hauling of manures on to the soil, and the produce therefrom, either by that system or some adaptation of wire-rope, or any other. The present depressed condition of agriculture will have done some good if it thoroughly impresses land owners and tenant farmers with the necessity of invention. Landlords have their rights, which I fully admit, and they have duties which are equally binding. You have noticed the tendency of late years for the farmers to have all their machinery of a portable description—portable engines, portable thrashing and finishing machines, portable grinding mills—and how he avoids attachments to the freeholds. The want of proper co-operation between landlord and tenant has altered the complexion of the machinery brought on to the farm to some extent, but after all the farmer has work he cannot do that, in fact, only the owner of the land can do. The question of roads, of drainage, of re-arranging of the land, of permanent buildings, are not work for a tenant under a six months' or any other notice. As soon as the depression touches the landowner, perhaps he will take a greater interest in the land, as he has a large stake in it, so that improvements may take place at an accelerated ratio. The importance of improved mechanism on the farm can scarcely be over estimated. How much is a day labourer worth? Spade in hand he is, say, a mechanic at the top of his condition, digging and preparing land for oats, wheat, barley, and turnips. Can you afford to give him 30s. per week? Can you give him 15s.? Is he worth 7s. 6d. to you? If you farm for these crops with manual labour I am afraid no amount of industry will save you from ruin. It is a great stride from the ox treading out the corn to the introduction of the hand-bail, still greater to the roller thrashing machine, and lastly we have the steam-engine attached to the thrashing machine, where we have dispensed with the rollers for the drum-beater. The stroke of the beater is oblique, but runs on thousand revolutions per minute, and by the invention of a process for raising a blast of wind, the chaff is driven out of the corn, and so we have not now, as they did of old, to wait until the wind rises before they perform this operation. The amount of work done you are so familiar with that you cease to be astonished. You do not take your corn to the mill on the horse's back, as our forefathers did, but construct the best roads to reduce friction, invent the best of carts and waggons, and the horse hauls a load that would break his back to stand under. Therefore the horse is more valuable, and the driver is more valuable also. The labourer with the spade is the same individual that drives the steam-plough engine, but we can afford to give him more money, as we consider he turns more work off his hand. Railroads help the farmers by facilities and cheapness of carriage, not so much as we think they might do. Our orders may be numerous but small, or, at any rate, lack the sustained demands of a colliery company or the transit to London of foreign cattle. There is a difference of soils for offering the least resistance to the passage of carts, implements, machinery, and horses over its surface, owing mainly to its containing more or less moisture. Wet land will only permit work being done at rare intervals; on naturally

dry or well-drained and cultivated land you may nearly find constant employment. When land is dry it carries, as we say. Such land has many advantages over an undrained wilderness like Poldon Flats. The wheel base of carts, engines, and machines are generally too narrow for travelling over land, though they be wide enough for roads. Our machinery, no doubt, has received a wonderful development from the encouragement given by the Royal and other agricultural societies; and an eminent engineering authority lately spoke of the high standard it had reached compared with any other. When the power is transmitted from the fly-wheel of the engine to the shaft of the thrashing drum, where the heaviest of the work is done by means of the belt, it cannot fail to be the most economical method of application. Our engine boilers are lagged, to prevent radiation of heat; the cylinders steam-jacketed, to prevent condensation of steam; and large fire-boxes for economising condensation fuel, and all parts strong and proportioned. I do not think that we shall easily improve the steam; though, so far as the use of wire rope is concerned, an engine to travel on the land, although we should have direct action and circular motion in the cultivating machine as the result; but it would limit the time available for the cultivation of the soil, as it would be but seldom that the land would be sufficiently dry, and in many cases the land would receive considerable damage from the wheels of the engines. No doubt circular motion is the desideratum for steam power, still, I expect we shall have to be content as we are with traction implements. An engine could not be expected to travel over the land to any secondary operations, such as harrowing, rolling, reaping, sowing, &c. Self-moving engines expend a great deal of power in self-propulsion over the land. The various systems of steam ploughing, or cultivating, I shall not enumerate. Mr. Smith's of Woolston is the simplest. Portable engine and windlass, some claws, anchors, and snatch blocks, wire rope, rope porters, and cultivator. With this he mashes up the lands from year to year. And the more you improve the system I suspect the worse it gets. The addition of anchors of a heavy character, requiring more the aid of horses, and renders it altogether more cumbersome and unweidly. The other extreme is the double engine system. Each engine carries a winding drum, and is stationed at opposite sides of the field, and pulls the implements alternately from one side of the field to the other. I think it best to have engines not less than from 12 to 14-horse power, as the manure labour is the same whatever the size. This necessarily involves a heavy outlay, which is only justifiable for a large holding, or to take out some return by hiring out in addition to one's work. The more I use the steam plough the more I am satisfied of its great utility. The work done is very superior to horse labour, especially in using the cultivator, as there is nothing such as the treading of the horses to undo the work of the implement. Our neighbours sometimes complain that their roads are cut up with the engines, and that they plunge up the head lands. The best plan is to make roads where wanted, and to repair them until they will carry an engine, and then they will carry anything else, and remain in repair for a long time. It enables steam to do many operations on the farm that could not very well otherwise be done, as the engines could not be moved about. I am inclined to think that roads, wherever your engines are required to travel, are advisable not only for that purpose, but for getting on manure and for getting off produce from the fields; half the complaints as to getting off turnips in the autumn would by this system be removed. Some have a field a long way from home, and it wants manuring; the farmer is waiting for a spell of dry weather, or a few days of frost (and it is very well it be can so take advantage of the elements), but he can get neither, and he must be doing, or lose the season. What is to be done? Where he might have a road he must plunge for it. The steam plough breaks up your land in a few days, and makes you independent of the season, and sets you at liberty. In working the horse, it should not be forgotten that he does best when travelling with a load at one-half his ordinary walking pace, therefore as much as possible the load should be adapted to the horse, and not the horse to the load, and no doubt, on a careful revision of our farm implements and machinery, some improvements might be affected; for instance, you want a light roller to get over the ground; you will get over the ground also if you have a wider roller, without going any faster, and much to the advantage of the horse. Our engines run at various speeds, perhaps the tendency is to higher speed

(I do not attach much importance to this), for still the law holds good that what we gain in speed we lose in power. Watts' rule as to the speed of the piston was, I believe, 220 feet per second. There is a limit even to the speed of steam. I have worked an engine, and found an advantage by altering the position of the eccentric sheaves so that the slide was open before the crank shaft was on the centre; and I have seen a steam gauge connected to the steam chest, and the fall of the pressure was something extraordinary on the first admission of the steam into the cylinder, and only gained its higher pressure when it appeared too late to be of service. I think this is something different to the wire drawing of steam, and that the quicker an engine runs the sooner should the steam be admitted at the end of each stroke, in order to obtain as high a pressure as possible at the commencement of the descending stroke of the piston. In these years farmers are in a state of transition; a great deal of machinery has been imported on to the land, and the workmen are only getting to be accustomed to it; yet, in many parts of the country, the steam plough is unknown, and the scythe is still in full swing. In the construction of the reaping machine, we have not yet arrived at circular motion in the cutting apparatus, nor will we be able to do so so long as we use or adopt the ridge and furrow system in our fields; on drained and deeply cultivated soils it is not only unnecessary but opposed to the teaching of science. It must be a wet field, indeed, where the water will accumulate in quantities to form a stream to run off the land by the furrows; but it may be easy to gather enough water into the furrows to stagnate and destroy the crop. Our farms, as a rule seem to be sufficiently drained when we have a coal mine at work underneath at least such is my experience for the drainage of ponds, and if ponds are drained away I cannot see why the land should not be drained also. It is a common expression to say of drains that they draw "well or ill," but in reality it is the pressure of the water within the porous soil and the force of gravity that carries it downwards into the drain or wherever it finds an outlet. Our reaping and mowing machinery is very much improved of late years. Still they seem to get quickly out of repair and appear heavy to drive. I should say it would be advisable to do away with the over-neck crank and have a bearing on each side of the crank of the connecting rod. The machine is very good when it is new; but in a shorter time than you would expect it informs people a far off what is the matter. The increasing difficulty of the knife being driven; then the connecting-rod breaks, or the knife, or something else; and failing these things, the horses tire. At this day we have machinery for doing the most laborious work of the farm; we sow grass seeds with the drill, cut the grass with the machine, rake and hay with the horse-rake, load the pikes on to bogies and haul them to the stack, and then elevate the hay by horse power. The heaviest work of the farm we can do by steam—that is the cultivation of the soil. We can sow by steam also; and I can see nothing to prevent us from reaping by steam also, providing it will pay for so doing. The binding is next to be considered, and if we have a machine or two for binding (in addition to reaping). I have not seen it at work, but expect it will be sufficient for four horses. Well, if this machine were nearly as wide again, and strengthened considerably, and made to work with the wire rope, perhaps the engine might condescend to take a pull at it. We thrash by steam, and we do a great deal of work by steam that was formerly done by horse-power; and we do a great deal by horse-power that was formerly done by manual labour. As long as coal is to be found under prohibition prices, no doubt it will be increasingly used as a motive power. When our stores of coal are exhausted, the great genius will return once more to the individual man for a new departure.

It is long ago since the spade was put into the hands of man as his tool for cultivating the soil. The man himself can do all variety of work under the most difficult circumstances, but this work would be worth less than it was fifty or a hundred years ago, taking the price of a quarter of wheat and the labourer's wages at the two periods, and land would go out of cultivation unless prices altered. Machinery in its results is therefore highly advantageous to society and ameliorates the condition of the agricultural labourer. It enables the farmer to pay him more for his services than he could otherwise afford; hence the introduction of machinery is of

most advantage to those who work with their hands. We know not the limits of this amelioration.

The pack horse carried the whole of his load, but the friction on a good road is only a 14th part of it with a well constructed vehicle. On the railway a strain of 10lb. is sufficient, we are told, to sustain the motion of a ton weight on the level, which is only the 1.224 part of the load. The mechanical action of natural forces comes in to assist the farmer, the rain saturates the soil, and frosts come and the water in the soil is frozen which (occupying a large space that it did before) splits the soil and divides it more finely than can be done with any machinery. The action of the plough is very imperfect; the overturned furrow slice would present the same appearance below as it does on the top, if it were visible, but the law of gravitation steps in and carries the particles of soil downwards to solidity from the furrow slice, and thus disintegrates the soil; indeed sometimes a crop is lost from this cause when the ploughing has been late and the crop has been sown it sometimes loses foothold by the soil falling away. Hence when you have land to sow it is a good rule to plough early, or if not so ploughed to use the cultivator or grub harrow in addition, which also disintegrates the soil and renders the seed bed more secure. The farm buildings should be placed in the centre of the farm—compare the expenses of management of a field near the homestead with that of one a mile and a half away, in cartage—where one costs perhaps a pound an acre the other will cost three, without taking into account the multifarious operations to be done on the land; there is a rent lost in the difference of cost in cartage alone. Village farms often suffer very much from this disadvantage. The turnip houses should also be placed centrally a wagon for the stock to be fed. Tramways are sometimes in use for this (the heaviest material in stock feeding) by which labour is much economised. Cartmen should be able to deliver the turnips into the houses without any impediment. Litter, hay, and meal claim your attention also for convenient storage. Shelter in many cases is equivalent to food, and buildings, constructed to keep up a certain temperature in the cold weather of winter will either save a certain amount of food or cause stock to fatten more rapidly with the same quantity. Many farmers are heavily handicapped in these respects; and if the landlord suspects that his tenant has enough to do, it is a judicious return of rent to increase the value of the farm by these improvements; but it might be injudicious to burthen him with the cartage of building materials. Or if he wished to maintain his rent when the land is too dear, I might mention that half-inch or ground bones on an old pasture partake largely of the character of a permanent improvement. The introduction of traction engines on highways, like the introduction of the locomotive itself, has met with a certain amount of opposition. Laws which would be amusing if they were not so annoying, require to be carried into effect, or their non-observance visited with penalties; frequently, no doubt, from complaints made to policemen who are only too faithful to their duties. Even yet we are not free of the roads that we ourselves pay the largest sums to maintain, and by-laws may come into effect that might possibly amount to practical prohibition, or at any rate to prevent further development in this direction. I suppose the Corporation of Newcastle is typical of many other large towns in maintaining the thorough toll. You may travel miles over miles into the country without charge. Either the urban population show little urbanity, or the inhabitants of rural districts are very generous. Perhaps the inhabitants of towns are right, and we should take care that foreign produce is not brought to our doors to undersell us by maintaining roads for it at our expense. In my opinion agricultural shows in general have been too partial in the encouragement of stock, and have to some extent neglected the implement and machinery department. The remedy, I think, would be to encourage large makers by a liberal prize occasionally. The rent of land is a large factor in the progress of agriculture. Some say the rent ought not to be too low. I am equally certain it should not be too high. Mr. Jacob Wilson told us, I think, that we grow nearly twice as much per acre as they do in France, and yet land near Paris is let at £50 per acre. It would appear our rents must be rather low. We were not told whether it grew corn, or vegetables, or grapes, or anything else. Perhaps it was let for building sites. I have seen land rented for more than that for building purposes. In a more extended sense the mechanism of agriculture comprises all natural forces. The action of rain and

the sun, frost and flood, and the air disintegrates the rocks and carries the particles away to the valley beneath. The resultant chemical action of carbonic acid and oxygen, moisture and heat, appears a more subtle force, dissolving the rocks on which the moss grows, the soil also upon which the plants feed, and the manure, which is a finer kind of soil, in its resistless menstruum. Like the careful physician, who endeavours to assist nature in combatting disease, the agriculturist labours to assist nature in her operations, and puts the land in the best available condition to reap the advantages of the summer's sun and the winter's frost, and plans his rotation to nourish the crops and destroy the weeds. If the land is too moist he puts a tap into it in the shape of a drain, and when he has made the best of the soil he can he will grow what suits it best; for although the plant has power to draw what it wants and reject what it does not want, yet it cannot get what is not there, and that which is there might be suitable for other crops. Climatic conditions are to be considered also. It is best always to take advantage of all natural forces—to cart your manures in the frost and make hay while the sun shines. If you work your land when it is too wet or too dry you may labour without profit. On looking backwards, we easily perceive that the laborious work of the agriculturist has disappeared to a certain extent, and yet we are still only on the threshold of new invention. We will still require more Watt, and Stephenson, and Davy, and Arkwright, and Fowlers in agriculture.

**A TEN THOUSAND-DOLLAR DAUGHTER.**—On a certain day, on a Pennsylvania railroad, a belle of a thriving Pennsylvania town, the daughter of a rich lumber merchant, was travelling in the same car with a shrewd old citizen of her native town and an agreeable young gentleman from the West, who tells the story. The latter had been talking to the belle, but as night drew on and the young lady grew drowsy, he gave up his seat to her, and placed himself beside the somewhat cynical Pennsylvanian. The latter began conversation by pointing to a high mountain, past which they were whirling, and said—"You see that mountain? Six or eight years ago it was covered by as fine a forest as ever grew, and worth 10,000 dollars, and upwards. Now, without a tree, covered with stumps, the land is scarcely worth a continental. The net produce of that mountain lies over there in that sea;" and he pointed to the recumbent belle; "that is my calculation. It has just absorbed all of that lumber which her father owned, to raise and educate the girl, pay for her clothes and jewellery, bring her out in society, and maintain her there. Some of you young men if you were given your choice between the mountain yonder as it now stands, and the net produce on that seat, would take the net produce; but as for me, give me the stumps."

**BURNHAM BEECHES.**—A correspondent of the *World* writes: "I enclose an announcement of the sale of Burnham Beeches. Dormore, I have heard will be sold to the Duke of Westminster. Its trees are its only attraction, and they have not received the care which Lady Grenville used to bestow upon them; so it is very likely that the place will improve in the hands of the Grosvenors. But Burnham Beeches in building lots ought to bring tears to the eyes of all those who have ever had the pleasure of living within reach of their picturesque forms and pleasant shade. The poet Gray called them his own, because there was nobody about to dispute his right to them. Mrs. Grote wandered amongst them on her white pony, whilst Jenny Lind warbled to her; and Chorley and Miss Mitford managed to get lost amongst them, Chorley ending his afternoon by sitting, tired out, on the top of a five-barred gate waiting for a chance fly. Then the picnic, the children's tea, the nooks and corners for artists! Poor old Davis what would he have said? Burnham Beeches made a fine background for him and the Queen's. Can nothing be done to save such a lovely spot from literally going to the devil? Picture to yourself 'Lot 20: so many acres, containing the Elephant Tree with pretty view, well adapted for the erection of a substantial villa residence; gravel; plentiful supply of water; historical associations; valuable timber!'

**NEWSVENDORS' BENEVOLENT AND PROVIDENT INSTITUTION.**—Mr. W. L. Thomas, managing director of the *Graphic*, will preside at the festival, to be held on the 7th of June, at Willis's Rooms, St. James's.

## GAME.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—Week after week every journal throughout country recounts at length the sayings, doings, and resolutions arrived at by the Central and various local Chambers of Agriculture; but it is somewhat surprising that, beyond the publicity given to these cogitations, little or no relief appears to be experienced by the members beyond that personal satisfaction which men always feel when indignant at some "grievance" they have been able to vent their pent up vials of wrath, by eloquently dilating thereon. It is true that a stray M.P. is occasionally pounced upon and talked at till he is fain to get on his legs and compliment the assembly on the discreet, calm, and practical manner in which the subject under discussion has been handled, somewhat facetiously adding, perhaps that, whilst he "cannot support the views of some of the speakers," he is "quite sure others have stated a good case, and therefore, can confidently promise them to give the matter his mature consideration."

Does it never strike these intelligent bodies that that mature consideration is about all they may expect, that the time spent in these discussions is little better than wasted? I make this introductory remark because there appears to linger in the minds of some of your correspondent a belief that amongst the "upper classes" those can be found who, having time and leisure at command, are better able to represent the interests of tenant-farmers in Parliament than men chosen from this latter particular body.

Let me ask: What would be said of a man who sowed good seed on a rock, or on a rich "lay," untilled and unfitted to receive the grain? However useful the rock may be to man, it does not usually bear heavy crops of corn. However thick the lay may be, its very luxuriance would soon strangle the growth of the seed, even if it were allowed to germinate in its midst. Yet is this not being done when "grievances" are sown broadcast amongst men who either cannot understand, or allow other and to them primal considerations to efface the necessity of giving relief from their minds?

However, to proceed with the subject of my present letter, that of Game—one which I approach with diffidence, because although the tenant has a very great deal to complain of, we must not lose sight of the claims of the landlord. I firmly believe that nothing would be more detrimental to the country than the abolition of the Game-laws and the substitution of a more stringent law of trespass, though the latter, on behalf of the tenant might, in these free-and-easy days be a little more strict than it is. I equally decline to subscribe to the wish to deprive the owner of the soil of the winged game for the benefit of the occupier, because the birds are sometimes found on the ground; but there is not one plea save that of uncompromising selfishness to favour the withdrawal from the occupier the right to destroy the hares and rabbits which are depredators of the first order, give very little sport to the landlord, but are mostly advantageous to the gamekeeper, that *bête noir* of the farmer, who, seldom very civil, sometimes particularly insolent, and generally exasperating, mostly breeds illwill between his master and the tenant. The idea put forward that if ground game were destroyed by the occupier, it would soon disappear from the face of the earth is simply ridiculous, and the contrary holds where liberal landlords have granted the right to kill.

Farmers are, as a general rule, fond of sport, and heartily sympathise with a true sportsman. Whilst therefore they would complacently permit a little damage in return for the pleasure of knocking the ground game over themselves, or occasionally helping their landlords to do

so, they with reason dislike seeing during a summer's evening their turnip crop, just struggling against many odds into existence, destroyed by rabbits, which improve the condition of the gamekeeper, who remorselessly treads down fences, lets out cattle, and is, with no small reason, accused of being a virulent vulpecide, and as such an uncompromising enemy to that right English, manly sport, which, although not indulged in by your humble servant, he would be heartily loth to see denied to those who do.

The over preservation of game is a national loss whether indulged in by the millionaire, whose sole idea of good sport is the "battue," by the absentee's agent, whose sporting proclivities are insatiable, and whose conscience is conspicuous by its absence, or by foreigners settling here and apeing English ideal manners and customs, who like a certain great Eastern potentate can afford to allow thousands of acres of fair cultivatable land to remain without tenants rather than part with "shooting rights."

The interests of the landlord and tenant are in reality now, and will be more so in the future, bound up together; education, the more scientific system of farming and capital required have tended to place them on an equal footing, and the death knell is happily sounding the departure of that class of men, who, having inherited or acquired land, are too proud or too much afraid of losing their "position in society" to till it themselves, even if they possessed the requisite skill and capital, yet are too needy or too greedy to let it at a fair rent to those who are content to be a little outside the world of fashion, to earn an honest but isolated living, and to lay by a little for seasons of depression. Such landholders are seldom too proud to use subterfuge to obtain tenants who will give rents utterly out of all proportion to the value of the land; their position as gentlemen gives their wordy promises a value to their dupes the law holds worthless, and it is not until after a bitter trial these deluded ones learn their simple but honest faith has been imposed upon, and well is it for them if they escape with no other loss. It is with such gentlemen that restrictions with regard to game are in such particular favour. Plenty of amusement to their friend in the field balances at times a lack of it at home, and gives "position" in the county, whilst it sometimes is used as an extra, although unjustifiable, source of income.

It is a fallacy to suppose that any satisfaction can be had out of any stipulation in an agreement to keep down game or give compensation. The difficulty of estimating the damage is so great, is sometimes so unfair to the landlord and at others so inadequate to satisfy the tenant that invariably it produces an unpleasant feeling between the two, whilst neither is satisfied. Where there is no such agreement, but a tacit or verbal understanding that the ground-game should be kept down within reasonable limits, however desirous the owner may be that this somewhat vague promise should be faithfully adhered to, it seldom is so. You may be desired to report any excess, and your letters may be immediately attended to; but what would that man be considered—what sort of a life would he lead were he to be constantly bothering his landlord with complaints, however justly founded, contingent on the sudden and unexpected fecundity of rabbits in various parts of the farm? I fear that the relations between all parties concerned would soon cease to be amicable.

Look at it in any light you please, there appears to be no question but that the ground-game, not being artificially fed by the landlord, but living chiefly if not solely

\* This is no ideal picture. I know of one landlord who has ruined no less than four consecutive tenants in one of his farms not a hundred miles from this city. These poor people can have by law no redress for excessive game damage.

on, and being destructive to, growing crops belonging to the tenant, without any redeeming qualification as in the case of winged game, which feeds as much on insect pests as on corn, should belong to the holder and cultivator of the soil. To go further, it should be absolutely illegal to permit those rights to be contracted away except under regulations which would make the recovery of any damage as easy as a common debt, together with all cost of procedure which may have been forced on the tenant to prove his case.

It may be said that by such an arrangement the onus of proof of non-existence of damage would be thrown on the landlord, that his "rights" would be as utterly disregarded as those of the tenant are at the present time, and that the pleasures of residence being removed he would seek abroad a more congenial atmosphere in which to spend his surplus cash. I very much doubt if justice between man and man will ever have so disastrous an effect, and if it did whether the nation, or even the locality would greatly miss so selfish a being, whilst such a change in the law would confirm the propriety of action of every far-seeing and liberally-minded landholder throughout the county, it would act as a wholesome check on the excesses of those who, whilst they hold the position of owners of the soil forget the duties and sympathy they owe to those whom fortune has not so highly favoured.

I am, Sir, &c.,

WILL WATON.

Winchester, April 30.

### VARIOUS NOTES.

The Ontario *Globe* of the 4th inst. published the following article:—

The concluding volume of the census gives some very interesting statistics relative to the progress and condition of Canadian agriculture. Commencing with the enumeration of the farmers themselves, we find that in the twenty years between 1851 and 1871 their numbers have nearly trebled in Ontario, and more than doubled in the four Provinces to which the census relates. The figures follow:—

	1851.	1871.
Ontario .....	86,637	228,708
Quebec .....	78,437	160,641
New Brunswick.....	18,601	40,394
Nova Scotia .....	31,604	49,769
	215,217	479,512

The ratio of the agricultural to the whole population in Ontario and Quebec also increased, that is, during those two decades we were becoming more and more an agricultural people. In every 1,000 of the population there belonged to the farming classes:—

	1851.	1861.	1871.
Ontario .....	351.5	394.9	493.5
Quebec.....	386.1	433.4	470.8
New Brunswick.....	—	497.6	467.0
Nova Scotia.....	—	533.8	419.5

The four Provinces..... 787.6 459.8 474.9

In 1871 the occupiers of land in the four Provinces are numbered as follows:—

	Total Occupiers.	Owners.	Tenants.	Em-ploy's
Ontario .....	172,258	144,212	27,340	706
Quebec.....	118,086	109,059	7,895	1,132
New Brunswick ...	81,202	29,059	2,034	109
Nova Scotia.....	46,316	43,830	2,314	172
	367,862	326,160	39,553	2,119

Their farms, it will be seen from the next table, are two-thirds of them, of less extent than one hundred acres each:—

	NUMBER OF OCCUPIERS OF					
	Under 10 acres.	10 acres to 50.	50 acres to 100.	100 acres to 200.	200 acres Over	
Ontario.....	19,954	38,882	71,864	33,984	7,574	
Quebec .....	10,510	22,379	44,410	30,891	9,896	
N. Brunswick.	2,669	6,415	11,888	6,900	3,330	
Nova Scotia.	7,148	11,201	13,138	10,401	4,428	
	40,281	78,877	141,300	82,176	25,226	

The total number of acres occupied is 36,046,410, of which 16,161,676 are in Ontario; the number of acres improved 17,336,288, in Ontario 8,833,626. Under crop there were 11,821,216, of which 6,537,438 were in Ontario; in pasture 5,240,399, and in orchards and gardens 274,673, of which 2,059,177 and 207,011 respectively were in Ontario.

Comparing these figures with former censuses, they would seem to prove that in the Province of Quebec the small holders are disappearing. Where there were 14,477 holders of under 10 acres in 1851 there were but 6,823 in 1861, and 10,510 in 1871; a variation, which perhaps indicates careless enumeration. The number of acres, occupied in Ontario has increased from 9,828,655 in 1851, and 18,354,896 in 1861, to 16,161,676 in 1871. The acres improved, which bore in 1851 the ratio of one to every three occupied, now bear the ratio one to every two acres occupied, the proportion being the same in Quebec as in Ontario.

For every one of the population there were in Ontario of lands occupied, 9.97 acres; lands improved, 5.45 acres; under crop, 4.03 acres; in pasture, 1.28 acres; in orchards, 0.13 acres. Quebec had for every inhabitant 9.25 acres occupied; 4.78 acres improved. New Brunswick had 13.90 acres occupied and 4.10 improved; Nova Scotia 12.97 acres occupied and 4.19 improved. The four Provinces had for every inhabitant 10.34 acres occupied, 4.97 improved, 3.39 in crop, 1.53 in pasture, and 0.08 in orchard and garden. For each family there were 57.88 acres occupied and 27.83 acres improved. The land so occupied represents 24.8 per cent. of the then total area of Ontario, 9.1 per cent. of the area of Quebec, 22 per cent. of New Brunswick, 37.6 per cent. of Nova Scotia, and 16.6 per cent. of the whole four Provinces.

We learn that we had in the four Provinces 573,643 ploughs and harrows, which is 11.6 to every 1,000 acres owned; 44,204 reapers and mowers, 0.9 to every 1,000 acres owned—the ratio, though, being 1.09 to the 1,000 acres in Ontario; 63,003 horse-rakes; 30,735 threshing mills, 0.6 to the 1,000 acres; 167,964 fanning mills, 3.4 to the 1,000 acres—6.2 to the 1,000 acres in Ontario.

Of horses and colts there were 836,743, of which 489,001 were in Ontario. This was 301.7 to every 1,000 of the population in Ontario, and 240 to the 1,000 in the four Provinces; 24.9 per 1,000 acres owned in Ontario and 16.9 per 1,000 acres in the four Provinces.

Horned stock counts up 2,624,290 head, of which 1,403,174 were in Ontario. This was 865.7 head per 1,000 of the population in Ontario, and 752.7 per 1,000 of the four Provinces. For every 1,000 acres of land owned there were 71.5 head of horned stock in Ontario and 53.1 in the four Provinces. Of sheep there were 3,155,509, of which 1,519,914 were in Ontario, being in the proportion of 77.3 sheep to the 1,000 acres owned in Ontario, and 63.9 per 1,000 acres in the four Provinces. Of swine there were 1,366,083—in Ontario 874,664, being 27.7 per 1,000 acres owned in the four Provinces, and 44.6 per 1,000 acres owned in Ontario.

When compared with the number of acres of improved



land, which is the real test of our wealth, the figures are as follows. The ratio borne to every 1,000 acres of improved lands by each of the animals and articles mentioned was:—

	On-tario.	Quebec.	New Brunswick.	Nova Scotia.	Four Provinces.
Horses .....	41.7	34.4	31.0	25.8	37.1
Colts and fillies...	13.6	10.0	7.2	4.7	11.2
Working oxen ...	6.4	8.5	9.5	19.8	8.0
Milch cows .....	72.3	71.8	71.0	75.4	72.2
Other cattle .....	81.1	57.6	59.2	73.2	71.0
Sheep .....	171.5	176.7	200.1	244.8	182.0
Swine .....	99.0	65.1	56.2	33.3	78.8

There is abundant food for reflection in this table. It appears from it that the average number of live stock on the 100-acre farm of Ontario is:—Horses, 5; cattle of all kinds, 16; sheep, 17; and swine, 10. It cannot be pretended that this is anything like the amount of live stock which our fertile lands should carry.

The following table, taken from a trade circular published by Messrs. H. W. Hill and Co., Decatur, Illinois (of pig-ringing celebrity), shows the number of horses and mules, cattle, sheep, and pigs in each state of the Union:—

STATE.	Horses and Mules.	Cattle.	Sheep.	Pigs.
Alabama .....	213900	580000	270000	952300
Arkansas .....	251100	577200	285000	1040300
California .....	288000	1390300	6581000	438500
Colorado .....	55000	420000	600000	12500
Connecticut .....	51500	224900	92500	59500
Delaware .....	23900	55200	35000	47600
Florida .....	34000	579400	56500	190000
Georgia .....	214500	765000	384300	1586900
Illinois .....	1229500	1962700	1258500	2900000
Indiana .....	731900	1196000	1092700	2422500
Iowa .....	775500	1686800	560000	2950000
Kansas .....	263900	800500	156600	431700
Kentucky .....	498300	712000	900000	1950000
Louisiana .....	167600	387000	125000	350000
Maine .....	81700	361600	525800	62200
Maryland .....	119300	221900	151200	259600
Massachusetts .....	132300	261000	603000	78600
Michigan .....	319100	765300	1750000	556100
Minnesota .....	221100	559800	300000	180000
Mississippi .....	193300	528000	250000	1284000
Missouri .....	794800	1581100	1271000	2585800
Nebraska .....	125900	298800	62400	235700
Nevada .....	12600	41000	72000	10900
New Hampshire .....	57100	216600	239900	42900
New Jersey .....	129000	232000	128300	154000
New York .....	902000	2100000	1518100	975000
North Carolina .....	197700	650000	490000	1180000
Ohio .....	792000	1474200	3783000	9250000
Oregon .....	105100	278800	1074600	193100
Pennsylvania .....	610200	1530700	1607800	937200
Rhode Island .....	16200	36900	24500	18100
South Carolina .....	107900	320000	175000	450000
Tennessee .....	429200	698200	860000	1900000
Texas .....	885000	4008300	3374700	1716700
Vermont .....	75900	348200	461400	54300
Virginia .....	235800	671700	422000	759200
W. at Virginia .....	115900	371400	549900	281500
Wisconsin .....	371000	963700	1323700	635300
The Territories .....	114000	750000	2800000	105000
The United States ...	11967200	30523400	35740500	32262500

The total number of farm animals in the United States in January, 1878, was thus officially estimated at 110,493,600.

Our Canadian correspondent writes under date of April 16:—I see that somebody who, as usual in Canadian matters, is "without prejudice," and "has no interest of any kind to serve," has been wrestling in your paper with a column or two of figures from the Dominion Census tables. As he has apparently been under the notion that in so doing he was answering statements made by me *re* Canadian export cattle capabilities, he is to be commiserated for his exertions. I agree with him it is a mistake—I would use a stronger term myself—to "decry Canada" without rhyme or reason, but he would be at a loss to show where or when I have done so in your columns or elsewhere. This gentleman, who has no interest to serve (in common with all his guileless fraternity), may call exposing fraudulent misstatements "decrying Canada," but that is talk for the marines. Your correspondent seems to have written under the notion that when I said this colony could not send more than 5 000 beasts a year to England, I signified that was the whole surplus not consumed here. And so he parades a lot of figures to show that in 1871 there were some millions of horned cattle in the Dominion. No doubt. If he could proceed to prove, as he seems to wish us to imply, that these were suitable for the British market, his figures would be worth something. But if he will look over my letters again, he will find that all my statements have referred to beasts *fit for the British consumer*, of which I repeat our supply is small, the native animal being useless for the English market, as it is tough and tasteless, and, as I said recently, severely let alone by exporters. The absurd position in which "Without Prejudice" is placed by his own figures is obvious. He computes that Canada has 250,000 surplus cattle every year reared and fattened "for any outside market." What, then, does the Toronto *Globe* mean by saying a 20 per cent. duty on American beasts will kill off the "Canadian" export trade with Britain? What do the *Mail* and *Monetary Times* mean when they say "three out of every four beasts" sent to Britain from Canada are bought in the Western States? What does Mr. Britton, the extensive Toronto dealer, mean when he writes to the *Mail* that dealers are compelled to buy in the States because "a sufficiency of suitable beasts cannot be had in Canada?" According to the British Trade Returns, Canada only sent about 18,000 beasts to England last year (those bought in the States included). Subtract 18,000 from 250,000, and you have a surplus of 232 000. Add the surplus of 1877, and here are nearly half a million beasts waiting for export. And yet the stoppage of the American supply, says the *Globe*, will be death to the "Canadian" export business. In fact, "without liberty to draw on the herds of the American plains, Canadian exporters cannot carry on their trade." Nothing more is required to show the fallacy of your disinterested correspondent's figures and deductions. What do Toronto dealers want to buy in the States for with 250,000 surplus stock annually hungering for a market? Your correspondent says there is not "now" one native born States man in the Canadian export trade. This may be true; I have heard immediately after the embargo was put on the American beasts, some of the Toronto Export Companies were dissolved. I have not had time to inquire yet, and it is a point of minor importance. Canadian immigration promoters are so apt at mystification that one has to attend carefully to their phraseology. The "now" of "Without Prejudice" looks rather dubious. The number of cattle sent to the "States" from Canada in 1873 and 1874 may be 74 thousand, or 74 million for all it has to do with the number sent to "England" last year. The beasts sent to Albany and other markets are not of the grade suitable for England. Because 74,000 native animals went to the States in



1873 and 1874, therefore, he argues, \$2,115 went to Britain in 1878. The argument is not convincing, and I say again without hesitation this colony did not, and indeed could not send \$2,115 suitable beasts to your side in 1878. That surplus is not in the country in the first place, and in the second the British trade returns put down the number at 18,000. Now, as I have shown on various occasions, at least two thirds of the Canadian exports came from the States, which leaves the real Canadian total at about 5,000, the very figures I gave. The Dominion Trade and Navigation Returns just issued are also cruelly subversive of the fables we have had. From June, 1877 to June, 1878, the Canadian export to England is set down at 6,902 beasts. Canada also sent 17,857 beasts (of an inferior grade) to Albany and other American markets, and imported 5,116 for home consumption, leaving a balance of 12,451. One more fact and I dismiss "Without Prejudice." The new tariff has doubled the import duty on American beeves. Your Correspondent's theories and figures will find that rather rough.

The exodus from the provinces of Ontario and Quebec of farmers and others with their families, is continuing at a prodigious rate, in fact it is surprising. Query: Why are all these farmers levanting from a country which Mr. Byrne holds up in the London *Globe* as a paradise of hope for British agriculturists.

The following official notice has been issued by the Argentine Republic in relation to immigrations for Buenos Ayres:—

Immigrants, on arrival, are landed at the expense of Government, and boarded and lodged free for five days, assisted to pass the Custom House, afforded every information to enable them to find employment, and finally sent free to wherever they elect to settle. All this is done by National Government employes who speak all languages, the emigrant being free to take or reject any advice given to him; so that all intending emigrants can come to the Argentine Republic with perfect confidence, although they may have no relatives here, as they will meet, in all quarters of the Republic, public employes specially bound to watch over them till they learn the customs of the country.

The wages during the harvest, which lasts four months, are from 30 to 45 hard dollars (£6 to £8) per month, with board and lodging (the hard dollar is worth five francs in French money).

The best time for farmers, agricultural labourers, indeed for all emigrants to arrive here, is from October to January. Farmers with a capital of from £80 to £120 sterling may come at any season of the year. No country in the world offers greater advantages to the farmer and stock breeder. The climate is temperate and healthy; land is cheap and fertile and can be worked all the year round, as snow is unknown. There are immense tracts of pasture land, and boundless forests; every kind of stock can be had at lower prices than in any other country; there are numerous trunk railway lines, deep rivers, almost daily communication with Europe, institutions similar to those of the United States, and even more liberal for foreigners, who can acquire land in fee without sacrificing their nationality.

There is no difficulty or delay in obtaining land at 2s. 6d. per acre, payable in ten years without interest, and each family may purchase from 65 to 1,000 acres. The first hundred families in each settlement will receive 250 acres gratis. Each of the thirteen Provinces of the Republic has passed special laws for the donation or sale of "chacra" (small farm) lots near the towns, which can be purchased at equally moderate prices, and are given gratis

in some provinces. In the colonies (settlements) already established families of agricultural labourers who work hard can easily obtain land and advances from the proprietors, who have more land than they can cultivate.

Price of stock.—Horned cattle for breeding £1 10s. per head. Sheep, 3s. 6d. per head. Mares, 11s. per head.

For further information apply at this office, No. 215, 25, de Mayo Street.

JOHN DILLON,  
Comm. Gen. for Immigration.

## CAN PLEURO-PNEUMONIA BE COMMUNICATED BY MEDIATE CONTAGION?

In the recent issue of the *Journal of the Royal Agricultural Society* an interesting report is published relative to the inquiries which have been undertaken by Dr. Bardon Sanderson, at the Brown Institute, for the purpose of elucidating certain obscure points in the pathology of pleuro-pneumonia.

It will be within the recollection of our readers that at the time of the commencement of the investigation, which was conducted under the auspices of the Royal Agricultural Society, we pointed out that the main point in dispute was the communicability of pleuro-pneumonia otherwise than by association with a diseased animal. The literature of the disease, English and Continental, the former mainly a more or less exact transcript of the latter, contains many vague general allusions to the extension of the affection by the agency of various products of diseased animals, portions of lungs, hides, manure, urine, and fodder, which has been contaminated with the excreta from sick cattle. Failing to discover in these allegations anything more than the mere outcome of that system of repetition which appears to be a necessary part of the art of making books, we appealed to our observations which are coextensive with the existence of pleuro-pneumonia in this kingdom; and we did not on this basis hesitate to state our conviction that the disease differs from other known contagia, in the circumstance that it cannot be propagated by means of the morbid products, as foot-and-mouth disease, sheep-pox, glanders, and farcy, for example, can be with absolute certainty.

At the beginning of the inquiry it was proposed to obtain authority from the Privy Council to move diseased animals to the Brown Institute for observation; we pointed out, however, that this course would vitiate the results of the principal experiments, and it was agreed that a certain number of healthy animals should be kept sufficiently long so insure that they were free from previous infection, and then an effort should be made to induce pleuro-pneumonia by any means short of contact with a diseased animal. We need not follow the course of the experiments which are described in detail by Mr. Duguid; it is enough to say that the results were negative as they were in similar experiments which were made many years ago in our own investigations.

A second object was kept in view by the Agricultural Society—the testing of the value of inoculation as a preventive of the natural attack. In this respect Dr. Burdon Sanderson's experiments are favourable, but he admits that they have not been sufficiently extensive to justify any sweeping conclusion, and he suggests that further inquiry is necessary in this direction to complete the investigation, which he regrets was prematurely arrested by the recent legislation.

The fact is that under present circumstances, healthy animals cannot be moved into an infected place, but it must be remembered that an infected place includes a large number of cattle which are free from disease, but are necessarily shut up for at least fifty-six days. Under such circumstances it would appear that every facility is offered for testing the value of inoculation on a large scale, and if the plan of operation which Dr. Bardon Sanderson advocates, that of venous injection, be as free from risk as it has been in his and Mr. Duguid's hands, the value of the all-god preventive might be effectually tested without cost or danger.—*Veterinarian*.

## IS HIGHER FARMING A REMEDY FOR LOWER PRICES?

No. I.

On Saturday, May 3rd, Mr. J. B. LAWES, of Rothamsted, delivered the following lecture before the East Berwickshire Agricultural Association:—

There can be no doubt in the minds of all present that British Agriculture is passing through a crisis of unusual severity. The complaints which farmers are accused of making, even in the best of times, spring from very different causes from those which we now hear of around us. Bad seasons, following each other in close succession, in a manner quite unusual even in the uncertain climate of these islands, have seriously reduced the produce of the land. Immense importations of corn have deprived the farmer of the higher prices which would otherwise have compensated him for his diminished crops. He pays a higher price for labour, frequently without any corresponding increase in its efficiency. Lastly, diseases among stock, the dread of future disease from imported animals, and the influence of importations of live stock and dead meat upon prices, present and prospective, have greatly increased his difficulties. For the moment his energies are paralysed, and he is led to enquire what he is to do next?

It need hardly be said that, under these circumstances advice is not wanting. In fact, it is so abundantly offered, and is of such various kinds, that you must have some difficulty in selecting that which is most applicable to your own case. You are told to farm more scientifically, to meet lower prices by increased production, or to put a stop to manure in your family circle! These are specimens of the numerous remedies proposed to enable you to meet the difficulties which at present surround you, and still to carry on your farming operations with a profit.

It will doubtless be some comfort to you, if I say at the commencement of my address, that I do not propose to add myself to the list of your advisers. I possess no specific against the combined effects of bad seasons, cheap corn, dear labour, and cheapening meat. You will gather from the title of my paper that my object is rather to assist you in examining into the applicability of one of the pieces of advice frequently offered to you; namely, that you should meet lower prices by increased production.

No one will deny that a great deal of the land of the country is badly farmed, or that it would be more profitable to raise more produce upon it. To what extent such is the case in Berwickshire I am unable to say. A reference to the Agricultural Statistics will, however, give us some idea of the general character of the cultivation of the county. I find that, in 1878, it comprised 193,623 acres of arable and pasture land, exclusive of heath or mountain land, and that this area was under different crops, as follows:—

	Per Cent.
Grain and pulse crops, . . . . .	33
Green crops (excluding clover and grass), . . . . .	18
Permanent grass, clover, &c., in rotation, for hay, . . . . .	5½
Do. Do. Do. not for hay, . . . . .	43½
	100

Thus, scarcely one-third is devoted to the growth of corn crops; and even if all the corn and potatoes grown, and all the hay made, were sold off the farm, the produce of scarcely 40 acres in every 100 would be sold, leaving 60 for consumption by stock for the production of meat and manure, the latter to be retained on the land. But we know how wide of the truth it is to assume that all the hay and oats grown are sold; and we have at the same time to bear in mind, that the straw grown on the 33 per cent. of land which is

devoted to corn, will for the most part be retained on the farm. If, in addition to these facts, we were to take into account the cattle foods and manures purchased and brought on to the land, I think we should have abundant evidence that Berwickshire is, upon the whole, a highly farmed county; and if a certain proportion is badly farmed, we may conclude that the remainder is in a high state of cultivation.

It is to those in this county who do already farm highly that my remarks are chiefly applicable; but they will apply also to high farming generally, wherever it may be practised. No one, I suppose, can doubt that the soils of this country are capable of producing very much more wheat and meat than they do at present, if not, indeed, all that is required to support the population. If imports of these articles were prohibited, or a heavy duty imposed upon them, there is no doubt that a much higher system of farming would be profitable than at present prevails. In such a case, however, our dependence on the produce of foreign soils would not be lessened. The increased production of wheat and meat here supposed could only be attained by increased imports of cattle foods and manures. The countries which now supply us with wheat and meat would supply instead such products as they were permitted to sell to us. Our dependence on the foreigner would therefore be equally great; the only difference would be that it would be for other commodities than at present.

Our subject is not, however, what should be done if wheat and meat were to advance in price; but whether a higher standard of farming can be recommended to compensate for a reduction in price. To put the matter plainly:—Supposing there were a permanent reduction in the price of the saleable produce of the farm to the extent of 20 per cent., would the proper remedy be to increase our produce per acre by one-fourth, and so to bring up the saleable value to the same amount as before?

There can be but little difference of opinion as to what is to be understood by the term "high farming." It is certainly not high farming that produces the wheat which is now selling at so low a price in our markets. When we read in the United States papers that in one year 20,000,000 acres of land had been purchased for cultivation, and that within ten years 10,000,000 acres had been added to the area under wheat alone, it will be at once understood that it is what is called *extensive* as distinguished from *intensive*, or high farming, that has yielded the supplies we receive. Nor can there be any doubt as to one main cause at least, of the present depression. Farming on the four-course system, consuming each alternate crop on the farm, and in addition to this, converting all the straw of the corn crops into manure, but without the use of purchased foods or manures, would not constitute high farming.

High farming is a very different process. It implies the importation of material from without. All soils are capable of yielding more or less annually from their own substance to the produce which grows upon them. But, the greater the amount of cattle-food and manure purchased and brought upon the land—that is, the higher the farming—the less will the soil itself contribute to the crops. Indeed, in many cases, it contributes nothing at all, but becomes richer by the process. Under such circumstances, the soil may be said to serve mainly as a reservoir for the manures applied, and for the necessary moisture, and to afford support to the growing plants; so that, with the aid of the sun's rays, they may be enabled to accumulate carbon (and other constituents) from the atmosphere. They thus, so to speak, manufacture raw material supplied from external sources. Under such con-

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ditions agriculture is a manufacture, depending on the products of other soils (and on the atmosphere) for its raw material, just as much as do the manufactures of wool, cotton, and silk depend on external sources for their material.

Adopting the foregoing description of high farming, we have next to inquire whether those who already practise it should carry it out still further, as a means of compensation for a lower standard of prices of corn and meat?

Before any answer can be given to this question, it will be necessary carefully to consider what are the various sources, the effects, and the cost of manures.

Many of the charges connected with farming are much the same whatever may be the value of the crops grown. Of course, harvesting a large crop of corn costs something more for labour than harvesting a small one, and the expenses on a heavy crop of roots will also be somewhat more than on a light one. Still, it may be said that, with the exception of the extra cost of the manure required to grow the larger crop, the charges remain very much the same whether the amount, and the value, of the produce be great or small. If therefore, the increase in the produce bore a constant proportion to the increase in the amount, and consequently the cost, of the manure applied—if, in fact, the application of two or three times as much manure yielded twice or three as much increase of crop—then higher farming would be a remedy for lower prices. But such is not the case. It may, it is true, be said that, as the produce increases, the proportion of the fixed expenses to be charged upon a given amount of it diminishes, thus tending to compensate for the less productiveness of a given amount of manure the greater the quantity of it applied. But a very little consideration of the facts I propose to bring before you would show that, with increased production beyond a certain limit, the cost of the manure for a given amount of increase increases very much more rapidly than the proportion of the fixed expenses diminishes.

Nowhere are the extremes of farming better illustrated, and nowhere can they be better studied, than in the results of the field experiments at Rothamsted. Nowhere else are various crops grown for a great many years in succession, in some cases without any manure at all, so as to tax the capability of the soil itself to the utmost, and in others with very liberal supplies, either of farmyard manure or of artificial manures, so as to enrich, as much as possible. So liberal, indeed, has been the application of farmyard manure in some of the experiments, that a critic, who apparently did not quite understand their object, was reported in the *North British Agriculturist* to have said that we seemed to have a spite against farmyard manure, as he considered that much smaller applications would have produced as much effect.

I propose now to call your attention to some of the field experiments in question, the results of which will prove that, beyond a certain limit, the increase of crop is not in proportion to the increase in the amount of manure applied. In other words, that the higher you farm beyond a certain limit, the less is the amount of increase you obtain for a given amount of manure, and, therefore, the greater the cost of that increase. If this be the case, it is obvious that the cost of manure is a very important subject for consideration.

It is frequently assumed that the manure made by feeding stock costs nothing; that by skilful and judicious management, the cost of the food, and the other expenses, will be covered by the value of the meat produced and sold; and that, this being so, the manure is obtained gratis. I shall, therefore, occupy a portion of the time at my disposal in illustration of the fact that the food of an animal will, as a rule, cost more than the meat produced will sell for; and that, consequently, the cost of the food, and the other necessary expenses, can only be recovered by charging a portion to the manure.

To commence with the field experiments. I shall first call your attention to some of the results of some experiments on an ordinary rotation of crops, which are now in the thirty-second year of their progress. The arrangement of

them is in reality very simple; though, from their number, it will require a little attention fully to comprehend the plan.

#### EXPERIMENTS ON ROTATION.

The ordinary four-course rotation of turnips, barley, clover, or beans, and wheat, has been adopted; and the eighth crop of wheat, that is to say, the last crop of the eighth course, is now growing. In the first course, a large crop of clover, which was mown three times, was obtained. In the second and third courses, red clover was again sown, but it failed each time, and beans were then put in instead. Beans were also grown in the fourth, fifth, sixth, and eighth courses; but in the seventh, red clover was again tried, and it grew successfully, again yielding three cuttings. We have had, therefore, eight crops of roots, eight of barley, six of beans, two of red clover, and seven of wheat; the eighth of this last crop being now growing.

Such being the course of cropping, I will now explain the system adopted as to manure.

One-third of the land has been kept entirely without manure throughout the whole period of the experiments.

One-third has received mineral superphosphate of lime alone, every fourth year, that is for the root crops.

The other third has received, also, every fourth year only, that is for the roots commencing each course, a very liberal artificial mixture, composed as follows:—\*

	Per Acre.
	Lb.
Rape cake ... ..	2,000
Sulphate-ammonia ... ..	100
Muriate ammonia ... ..	100
Sulphate of potash ... ..	300
Sulphate of Soda ... ..	200
Sulphate of Magnesia ... ..	100
Superphosphate of lime ... ..	350

This mixture I shall speak of as the Complex Manure.

Next as to the treatment of the crops:—

Each of the three portions, so differently treated as to manure, has been divided into two experiments. From one half, the whole of the produce, roots and tops, corn and straw and clover has been removed. On the other half of each, the only difference has been that the roots were fed on the land by sheep having no other food, and the tops were also left on the land.

We have, therefore, three experiments in which the whole of the produce has been carried away for thirty-one years in succession; on one without any manure having been applied; on another with mineral superphosphate of lime alone applied to the roots, that is every fourth year; and on the third with a very heavy artificial manuring, also for the roots only. We have also three exactly parallel experiments with the roots fed upon the land by sheep instead of being carted away.

I may mention that there is another series of six experiments, corresponding in every respect with those the results of which are given in the Tables, with the exception that bare fallow, instead of either beans or clover, has been taken between the barley and the wheat in each course since the first, when clover was taken. I do not propose to refer to this last set of experiments on the present occasion, as to do so would lead me away from my subject; but I may observe that the comparison between a rotation with clover or beans, and one with bare fallow, presents many points of interest.

I will now call attention to the results obtained in these Rotation Experiments. In Table I. is given the produce of roots, of corn, and of clover hay, and to this I shall confine my remarks. But, for the information of those who may wish to study the subject further, there are given in Table II. the amounts of the "Swede-tops" and of the straw also.

\* For the first course, only 1000 lb. rape cake instead of 2000 lb., as always afterwards were applied. In the first and second courses less superphosphate, and in the first course less potash, and no soda or magnesia, was used.

TABLE I.

EXPERIMENTS ON FOUR-COURSE ROTATION, AT ROTHAM-  
STED.Summary:—Average Produce of Roots, Corn, and Clover  
Hay; Eight Courses, 1848-1879.

	Roots Carted.	Roots Fed.
<b>ROOTS—SWEDES, 7 crops; 1848, 1852, '56, '60, '64, ('68 failed), '72, '76.</b>	Tons.	Tons.
Unmanured continuously .....	1½	1½
Superphosphate, for Roots only .....	7½	8½
Complex Manure, for Roots only .....	13½	13½
<b>BARLEY GRAIN, 8 crops; 1849, 1853, 1857, 1861, 1865, 1869, 1873, 1877.</b>	Bushels.	Bushels.
Unmanured continuously .....	35	30½
Superphosphate, for Roots only .....	28½	29½
Complex Manure, for Roots only .....	41½	46½
<b>BEAN CORN, 6 crops; 1851, 1858, 1862, 1866, 1870, 1878.</b>	Bushels.	Bushels.
Unmanured continuously .....	12½	12
Superphosphate, for Roots only .....	12½	14½
Complex Manure, for Roots only .....	21½	24½
<b>CLOVER, 1850 and 1874. (Calculated as Hay.)</b>	Cwts.	Cwts.
Unmanured, continuously { 1850 .....	5½	49½
{ 1874 .....	31½	28
{ Mean... ..	42½	38½
Superphosphate, for Roots { 1850 .....	57½	61½
only .....	52½	62½
{ Mean... ..	55	57½
Complex Manure, for { 1850 .....	63	62½
Roots only .....	84½	87
{ Mean... ..	73½	74½
<b>WHEAT GRAIN, 7 crops; 1851, 1855, 1859, 1863, 1867, 1871, 1875.</b>	Bushels.	Bushels.
Unmanured, continuously .....	30	26
Superphosphate, for Roots only .....	29½	32½
Complex Manure, for Roots only .....	33½	33½

TABLE II.

EXPERIMENTS ON FOUR-COURSE ROTATION, AT ROTHAM-  
STED.Summary:—Average Produce of Swede-Tops and of Straw  
Eight Courses, 1848-1879.

	Roots Carted.	Roots Fed.
<b>SWEDE-TOPS, 7 crops; 1848, 1852, 1856, 1860, 1864, (1868 failed), 1872, 1876.</b>	Tons.	Tons.
Unmanured, continuously .....	½	½
Superphosphate, for Roots only .....	1½	1½
Complex Manure, for Roots only .....	2 1-6th	2 1-5th
<b>BARLEY STRAW, 8 crops; 1849, 1853, 1857, 1861, 1865, 1869, 1873, 1877.</b>	Cwts.	Cwts.
Unmanured, continuously .....	19½	17½
Superphosphate, for Roots only .....	15½	22½
Complex Manure, for Roots only .....	23	28½
<b>BEAN STRAW, 6 crops; 1854, 1858, 1862, 1866, 1870, 1878.</b>	Cwts.	Cwts.
Unmanured, continuously .....	9½	9½
Superphosphate, for Roots only .....	10½	13½
Complex Manure, for Roots only .....	16½	16½
<b>WHEAT STRAW, 7 crops; 1851, 1855, 1859, 1863, 1867, 1871, 1875.</b>	Cwts.	Cwts.
Unmanured, continuously .....	28	25½
Superphosphate, for Roots only .....	29	32½
Complex Manure, for Roots only .....	35½	35½

In the upper division of Table I you have the average produce of roots per course, over seven courses (one failing), under each of the three conditions as to manure, and both on the carted and on the fed portions of the land. You will observe that, without manure, there was practically no crop of roots at all. The Swedes which grew did not represent the cultivated root you are accustomed to see, either in size, form, or composition. Mineral superphosphate of lime, alone, increased the crop considerably, giving an average of between 7 and 8 tons of roots. The complex manure gave an average of 5 tons more, raising the crop to about 13 tons. You will observe that, under neither condition as to manuring, was there any material difference in the succeeding crop of roots grown on the portion from which they had previously been carted, as compared with that on which they had always been fed. It is to be concluded, therefore, that the manure left on the land by the sheep, was either taken up by the intermediate crops, lost by drainage, or remained in the land in a condition not available for the next crop of roots.

There being practically no crop of roots to carry away from the unmanured land, and as little to be fed on the land, we should naturally expect scarcely any difference in the amounts of the crops subsequently grown on the two portions of unmanured land. We find, however, a considerable difference, there being an average of more than four bushels of barley in favour of the portion from which the roots are carted, as compared with that on which they are fed. It is quite certain that this anomalous result is not due to any want of care in the conduct of the experiments. It may, I think, safely be attributed to a slight but unfortunate difference in the character of the land. In the present state of our knowledge on such subjects, considerable caution is necessary in attempting to trace a connection between the fertility of a soil and its composition as shown by analysis. Still, I may mention that, at two periods, with an interval of seven years between, samples of the first 9 inches, the second 9 inches, and the third 9 inches, or a total depth of 27 inches, have been taken from each of the separate plots of land; and, on each occasion analysis has shown a marked superiority in the land from which the roots are carted, and which has yielded the largest crops of both barley and wheat; and the superiority is more marked in the second and third than in the top 9 inches of soil.

You will doubtless notice with some surprise that so much barley was grown on land in a condition incapable of growing even a moderate crop of roots. From 4 to 4½ quarters of barley is probably as much as the average yield of that crop in Great Britain. On this point it should be borne in mind, that as nothing was removed in the preceding root crop, the land was, to all intents and purposes, fallowed for the barley. It will be seen, further on, however, that the wheat crop growing in this permanently unmanured rotation, also approached very closely to the average yield of that crop over the country at large.

Upon the land manured with mineral superphosphate for the Swedes, the removal of about 8 tons of roots (and the tops) has reduced the produce of barley to 28½ bushels, or to nearly 3 bushels less than the lowest unmanured produce; whilst the consumption of the Swedes on the land has raised the produce to nearly 40 bushels. The exhaustion of the soil by the removal of the roots is thus equal to the loss of more than 11½ bushels of barley.

Turning to the complex manure plots, it will be seen that, although from the portion from which the roots were carted a much larger quantity was removed than from the corresponding portion of the superphosphate plots, still the crop of barley was very much greater. It was, in fact, about 13½ bushels more than where the superphosphate roots were removed, and even from 1 to 2 bushels more than where the superphosphate roots were consumed upon the land.

The explanation of this is not far to seek. The superphosphate supplied no nitrogen, but it enabled the root crop to gather up a quantity already accumulated within the soil itself. The available stock within the soil of this important substance was so far drawn upon by the removal of the 8 tons of roots, and their tops, that the succeeding crop of barley was much reduced. In the rape-cake and ammonia salts of the complex manure, on the other hand, from 130 to 140 lb. of nitrogen were supplied, and this is very much more than was removed in the 13 tons of roots grown by it. There was, therefore, a considerable residue of that supplied in the manure

available for the succeeding barley crop, which was, accordingly, raised to 41½ bushels.

The consumption on the land of the Swedes grown by the complex manure has added only about 5½ bushels more. Nevertheless, it is certain that by far the larger proportion of the nitrogen, and other constituents, derived from the soil by a crop of roots, is returned to it when they are consumed by animals on the land; whilst, of those constituents which are derived by the plant from the atmosphere, by far the larger proportion is returned to the atmosphere by the animals.

It is obvious that, in this experiment, where the highly manured roots were fed on the land, compared with that where they were drawn off, we have, so far as the succeeding barley is concerned, an instance of high farming, without a corresponding return in the amount of produce.

Turning to the bean crops, it will be observed that, both on the unmanured and the superphosphate plots, they are very small. On the unmanured plots there is practically no difference between where the roots had been carted and where they had been fed. On the superphosphate plot the crop of beans was rather higher where the roots had been fed. On the complex manure plots the crop of beans was considerably higher; being about 22 bushels where the roots had been carted, and about 24½ bushels where they had been fed. This is rather more than double the amount obtained without manure. The difference, or 12 bushels, is, therefore, due to the residue of the manures left after the removal of the barley.

The difference in the amounts of produce of the two crops of clover is exceedingly interesting. Between 1850, when the first, and 1874, when the second crop of clover was taken, six crops of wheat, six crops of barley, and five crops of beans had been removed from the whole of the plots, and from one-half of them five crops of roots in addition.

On the unmanured plots about 1 ton less hay was grown per acre in 1874 than 24 years previously. On the superphosphate plots the second clover crop was slightly lower than the first where the roots (as well as all the other intermediate crops) had been removed; but it was in a greater degree higher where the roots had been consumed on the land. It is remarkable that, although the intermediate crops removed considerably more nitrogen, and also more of other constituents, from the superphosphate than from the unmanured plots, the superphosphate plots should still yield a much higher crop of clover at the second period. I am disposed to think that this is due, in part at least, to the gypsum contained in the superphosphate, but probably partly also to the reactions of the superphosphate in liberating other constituents within the soil.

On the complex manure plots the clover crop of the first course was considerably higher than that on either of the other plots, and the later crop, that of 1874, was about 1 ton more than the earlier one, on both the carted and the fed portions. Comparing the highest crop with the complex manure with the lowest without manure, there is a difference of nearly 8 tons more clover hay where the land was in the much higher condition. Since the commencement of the experiments there had been seven, and since the previous clover crop in 1850 there had been six, applications of the complex manure; and although a large proportion of the nitrogen supplied in it is accounted for in the increase of produce removed, a large amount still remained unaccounted for. It is seen, therefore, that an important effect of the red clover is to gather up the residue of manure which none of the other crops in the rotation were able to do. It is considered a great desideratum to grow red clover as frequently as possible; but it is obvious that the crops must be small, or fail altogether, if it be attempted to grow it when there is not a sufficient accumulated residue of the proper manorial constituents available within the soil.

In the lowest division of the Table the average produce of the seven wheat crops is given. You will observe that there is exactly the same difference between the produce of the two unmanured portions as in the case of the barley, namely, 4 bushels; and that the lowest amount is again where the roots were fed on the land. This result affords further confirmation of the supposition that there was a difference in the character of the soil of the two plots. The average produce of the two unmanured plots is 28 bushels of wheat, and it was 33 bushels of barley. Thus, we have the remarkable fact, as already alluded to, that upon land entirely unmanured for 31 years the crops of barley and of wheat grown in the rotation have very nearly corresponded with the average yield of those crops in the United Kingdom.

As you may perhaps imagine that the soil must be naturally a very fertile one, I have brought a section of it for your inspection.

The crops of wheat on the superphosphate and on the complex manure plots do not differ very much. They are higher where the superphosphate roots were fed than where they were carted; and they are rather higher still on both the complex manure plots, but identical on the two plots so manured, from one of which the roots were carted, whilst on the other they were fed.

I think you will agree with me in thinking that the result of this high farming, where the highly manured roots were fed upon the land, is somewhat disappointing; and that to farm still higher, as prices fall, would be a mistake.

I have long ago satisfied myself that the four-course rotation, and the feeding of roots upon the land, or even the growth of turnips at all, is quite unsuitable on the soil and with the climate of Rothamsted. We have learnt much respecting the action of manures, the requirements of different crops, and the influence of climate upon them, during the many years of the progress of our field experiments, and among other things, that we can gather up much more of the manure applied by means of a mangel than of a turnip crop.

#### EXPERIMENTS WITH FARMYARD MANURE.

I will now bring before you some experiments in which farmyard manure has been applied many years in succession to different crops. When you are urged to farm higher, the meaning is that you should put more dung upon your land. Consequently it is of great importance to ascertain, with as much accuracy as possible, the effects of the application of large quantities of dung.

In Table III. is given the produce of wheat, grain and straw, and of barley, grain and straw, by the application of 14 tons of farmyard manure per acre per annum. In the upper division of the Table the results obtained with wheat, and in the lower those obtained with barley, are recorded. The experiments on wheat have now been continued for 35 years, and the average produce per acre per annum is given for the first 8 years, the next 9 years, the next 9 years, and the last 9 years. The experiments on barley have been continued for 27 years, and the results are given for the three periods of 9 years each, corresponding with the last three periods in the case of the wheat.

TABLE III.

PRODUCE OF WHEAT AND OF BARLEY, BY 14 TONS FARMYARD MANURE PER ACRE, EVERY YEAR.

	Average per acre per annum.	
	Dressed Corn.	Straw.
	bushels.	cwt.
<b>WHEAT, year after year, on the same land—</b>		
35 years, 1844–1878.		
First Period, 8 years, 1844–1851 .....	28	26½
Second Period, 9 years, 1852–1860 .....	34½	34½
Third Period, 9 years, 1861–1869 .....	37½	33½
Fourth Period, 9 years, 1870–1878 .....	31	29½
<b>BARLEY, year after year on the same land—</b>		
27 years, 1852–1878.		
First Period, 9 years, 1852–1860 .....	44	26
Second Period, 9 years, 1861–1869 .....	52	31½
Third Period, 9 years, 1870–1878 .....	49½	29½

Referring first to the wheat, you will observe that the average produce of the first 8 years is the lowest, that of the next 9 years is higher, that of the third period is higher still, and that of the last 9 years again considerably lower; being only about 3 bushels more than over the first period, about 3 bushels less than over the second, and 6 bushels less than over the third period.

It is quite obvious from this result, that the produce was not at all in proportion to the accumulation of manure in the land. When the soil was analysed a few years ago, it was found that the first 9 inches in depth was nearly twice as rich in nitrogen as that of any of the artificially manured plots, yielding as much, or even more, produce. There can be no doubt that, whilst there is a general tendency to increase in produce as the result of this great accumulation of manure in the soil, the fluctuations are greatly dependent on the charac-

ture of the seasons. Thus, the third period, which gives the highest produce, included some very productive years, whilst the fourth period included a number of bad seasons, the adverse influence of which, the constantly increasing accumulation of manure within the soil only very partially obviated. It will be observed, too, that the amount of straw, the excess of which is a sure sign of excess of manure and over luxuriance, upon the whole increases rather less than that of the corn; there being less straw over the third period, with the highest produce of corn, than over the second with a lower produce of corn; whilst the fourth period gives considerably less than either the second or the third. This is the more remarkable, since the annual application of 14 tons of dung will have annually brought upon the land the equivalent of from 3 to 4 tons of straw. The fluctuations in the produce of straw, as well as in that of the corn, further illustrate the influence of season in spite of the accumulation of manure.

Turning to the experiments with barley, we have, upon the whole, very accordant results over the three periods, compared with the same three periods with wheat. Thus, the last period but one, which included a number of very good seasons, gave more produce than the last period, notwithstanding the greater accumulation of manure in the later years. There is in the barley, too, as with the wheat, no striking increase in the production of straw; for although there was considerable variation in the proportion of corn to straw in individual years, according to season, the average proportion is almost identical for each of the three periods.

It is then obvious that there is no increase of produce, of either wheat or barley, over the later years, at all commensurate with the increased accumulation of manure in the soil.

You may doubtless be interested to know something of the after effects of these great accumulations of dung in the soil, seeing that they increase the crops so inadequately during the period of the application of the manure.

Table IV. affords some information on this point. The two upper divisions relate to barley, and the lower one to meadow hay. After 14 tons of farmyard manure had been applied for 20 years in succession on one plot in the field devoted to the continuous growth of barley, the plot was divided. On one-half the annual application of the dung has been continued, now for a period of 7 years more; whilst the other half has been left unmanured, also now for 7 years. In the experiments on meadow hay, the application of 14 tons of farmyard manure per acre per annum was continued for 8 years; and the land has since been left unmanured for 15 years.

TABLE IV.  
SHOWING THE EFFECTS OF THE UNEXHAUSTED RESIDUE  
OF FARMYARD MANURE.

	Average per acre per annum.	
	Produce.	Increase over continuously unmanured.
<b>BARLEY GRAIN.</b>		
20 years, 1852-1871, 14 tons farmyard manure every year	48½ bushels.	28½ bushels.
7 years, 1872-1878, 14 tons farmyard manure every year	49½	36
7 years, 1872-1878, unmanured, after 20 years farmyard manure	36½	22½
<b>BARLEY STRAW.</b>		
20 years, 1852-1871, 14 tons farmyard manure every year	28½ cwt.	16½ cwt.
7 years, 1872-1878, 14 tons farmyard manure every year	29½	23
7 years, 1872-1878, unmanured, after 20 years farmyard manure	20½	13½
<b>MEADOW HAY.</b>		
14 tons farmyard manure every year, 8 years, 1856-1863	42½	19½
Afterwards unmanured	5 years, 1864-1868	40½
	5 years, 1869-1873	29½
	5 years, 1874-1878	23½

It will be seen that there is an average of only 1½ bushel of barley grain and 1½ cwt. of straw, per acre per annum, more over the last 7 years than over the first 20 years, where the application of the dung was continued. Where the dung was discontinued after 20 years, the produce of corn was, over the next 7 years, not quite three-fourths as much, and that of the straw but little over two-thirds as much; as where it was continued. The average annual deficiency was 13½ bushels of corn, and 9½ cwt. of straw. Compared with the continuously unmanured produce over the same periods (which, however, declined considerably over the later years) it is seen that the annually applied dung gave an average increase, over the first 20 years of 28½ bushels of corn and 16½ cwt. of straw, and over the last 7 years of 36 bushels of corn and 23 cwt. of straw. And where the dung was discontinued over the last 7 years, there was an average increase of nearly 23 bushels of grain and 13½ cwt. of straw over the continuously unmanured produce. In the last year of the seven, 1878, the plot where the application of dung was continued gave 36½ bushels of corn and nearly 26½ cwt. of straw more than the unmanured plot; and the plot where the dung was discontinued gave, in the same or seventh year of the discontinuance, nearly 12 bushels of corn, and nearly 10½ cwt. of straw, more than the unmanured. It is obvious, therefore, that the residue of the 20 years application of dung is still yielding increase. It is, however, gradually declining. But there is no doubt that the residue will continue to be effective in a still more declining ratio for many years to come. It would, indeed, take considerably more than a century at the present rate to recover in increase of produce all the nitrogen of the manure which has not yet been so recovered.

Turning now to the results obtained with meadow-hay, as already stated, 14 tons of farmyard manure were applied per acre annually for 8 years in succession, and the produce has since been taken for 15 years without manure. The Table shows the average annual produce and increase of hay over the 8 years of the application, and over the first 5, the second 5, and the third 5 years afterwards. It will be observed that over the 8 years of the application the average produce of hay was nearly 2 tons 3 cwt.; and the average increase over the continuously unmanured produce was not quite 1 ton. Over the first 5 years after the cessation of the application, the average produce was about 2 cwt. less; but, substantially, both produce and increase averaged much about the same as over the 8 years of the application. Over the second 5 years, the produce diminished to less than three-fourths as much as over the first 5; and the increase was little over 10 cwt. of hay per acre per annum. During the last 5 of the 15 years, the produce was little more than half as much as its original amount, and the increase over the unmanured produce of the same period was not quite 7 cwt.

During the 8 years of the application of the dung there were obtained, in all, 17 tons 3 cwt. of hay, corresponding to 7 tons 13 cwt. of increase; over the next 15 years there were obtained 23 tons 7½ cwt., corresponding to 9 tons 2½ cwt. of increase, due to the residue of the previously applied dung. Here, as in the case of barley, it would require very many years to recover anything like the whole of the yet unrecovered residue of the previously applied nitrogen of the farmyard manure.

Looking to such results as the above, relating to barley and to meadow-hay, it is not difficult to understand why a tenant who has been farming highly for a number of years should endeavour to get out some of the residue of the manure which he has accumulated in the land before he leaves it. But if so small a proportion of the constituents of the manure is recovered in the increase of crop during the years of the application when dung is very liberally used, it is not so evident that higher farming, which means more dung, should be a remedy for lower prices. Nor can I understand why the so-called "lasting" effects of dung should be considered such a merit. The Rothamsted experiments with various crops agree in showing that a given amount of constituents supplied in dung does less work, and takes a longer time to do it, than when supplied in any other form.

#### EXPERIMENTS WITH ARTIFICIAL MANURES.

The next illustrations will show the comparative effects of moderate and large amounts of artificial manures. In the upper division of Table V. we have the produce of wheat, both corn and straw, over 27 years—by a complex mineral

manure used alone; by the same mineral manure and 200 lb. ammonia salts; by the same and 400 lb.; and by the same and 600 lb. ammonia salts. In the lower division of the Table is given the average produce of barley over 6 years—with superphosphate of lime alone; with superphosphate and 200 lb.; and with superphosphate and 400 lb. ammonia salts.

TABLE V.

SHOWING THE EFFECTS OF MODERATE AND OF LARGE AMOUNTS OF AMMONIA SALTS.

	Average per acre per annum.	
	Dressed Corn.	Straw.
<b>WHEAT every year, 27 years, 1852-1878.</b>		
Complex mineral manure, alone.....	Bushels.	Cwts.
Complex mineral manure, and 200 lb. ammonia salts.....	15½	13½
Complex mineral manure, and 400 lb. ammonia salts.....	24½	22½
Complex mineral manure, and 600 lb. ammonia salts.....	33½	33½
Complex mineral manure, and 800 lb. ammonia salts.....	38½	40½
<b>BARLEY every year, 6 years, 1852-1857.</b>		
Superphosphate, alone.....	31½	16½
Superphosphate, and 200 lb. ammonia salts.....	45½	28½
Superphosphate, and 400 lb. ammonia salts.....	49½	34

Referring first to the wheat it will be observed that by the addition of 200 lb. of ammonia salts per acre per annum to the mineral manure, an average increase of nearly 9 bushels of grain is obtained. By the addition of a second 200 lb., in all 400 lb. of ammonia salts, there is a further increase of the same amount, that is, nearly 9 bushels. By the addition of a third 200 lb., in all 600 lb. of ammonia salts, there is a further increase of only 9½, instead of 9 bushels. In like manner the first 200 lb. of ammonia salts give 9½, the second 11, and the third only about 6½ cwt. increase of straw. Now, assuming that the application of 400 lb. of ammonia salts was the limit of high farming with profit, with wheat at 6s. per bushel, I cannot see how it could be maintained that a further 200 lb., yielding little more than a third as much increase as when used in more moderate quantity, should be employed because the price of wheat was reduced to 5s. per bushel. On the contrary, the conclusion I should draw from the results of these experiments is, that the application of the 600 lb. of ammonia salts could only be profitable if the price of wheat were to rise instead of to fall.

Again, it will be seen that in the case of the barley, the addition to superphosphate, of lime, of 200 lbs. of ammonia salts gave an average increase of nearly 14 bushels, whilst by the addition of a second 200 lb., in all 400 lb. of ammonia salts, a further increase of little more than 4 bushels was obtained. It will be observed, however, that whilst with the increase of 14 bushels of grain there was an increase of only 12 cwt. of straw, there was with the further increase of 4 bushels of grain an increase of 5½ cwt. of straw, or a much larger proportion of straw to corn in the increase by the second than in that by the first 200 lb. of ammonia salts. It was, in fact, so evident from the bulk, and the laying of the crop, that 400 lb. of ammonia salts was an excessive application, that, after its use for 6 years, the experiment was abandoned. Here, again, I think it must be evident that it would be higher, and not lower prices, that would justify the higher standard of farming.

From the various results which I have laid before you, you will have gathered that when farmyard manure is used, and even, though in a less degree, when manure is deposited on the land by animals feeding upon it, there is less immediate increase for a given amount of constituents supplied, and more accumulation within the soil, than when certain artificial manures are employed. You must not suppose that, in bringing this fact prominently to your notice, I wish in any degree to depreciate the importance of, so to speak, natural manures, and to exalt that of artificial manures. The production, and the use, of farmyard manure, are a necessity of the general economy of a farm; and there must be the more of it produced or at any rate the more of animal manures, the greater the

amount of meat produced. Nor would it be possible to rely mainly on artificial manures. I do think, however, that farmers generally do not sufficiently recognise the slowness of the action of the natural manures of the farm; and that, so far as they do so, they frequently even look upon it as a merit rather than otherwise, that it should be as they say, more "lasting." But slowness of action means slowness of return for the outlay; and this will be the greater the more excessive the amount of the manure applied. In my opinion, the object to be attained, and that which I have no doubt will characterise the most successful farming of the future, is to get as quick a return as possible for the outlay in manures, whether natural or artificial. This can only be fully accomplished—with freedom in the growth and sale of that produce which is the most profitable, the selection of the crops which are the most suitable to the soils, the seasons, and the demands, of the locality, and such a judicious adaptation of natural and artificial manures to the crops to be grown, as to obtain the maximum increase of produce, with the minimum residue left unproductive in the soil, and subject to loss by drainage.

To sum up in regard to this first branch of my subject:—It has been shown by reference to the results of experiments on an ordinary four-course rotation with different manures, in some cases carting off the roots, and in others consuming them on the land, that, beyond a certain limit, the increase of produce was not commensurate with the increase in the amount of manure accumulated within the soil. The next illustrations showed that, when farmyard manure was used in excessive amount, for the direct growth of either wheat or barley, the increase of produce by no means corresponded with the accumulation of manurial constituents within the soil; that, notwithstanding an increasing accumulation from year to year, the crops even diminished in the later years under the influence of bad seasons, the increased amount of manure in the soil not fully compensating for the adverse influences of the seasons; and lastly, that the unexhausted residue of the previously applied dung, though yielding a considerable increase for many years afterwards, did so in a rapidly decreasing ratio, and only in such proportion that it would take very many years to recover the manure applied; even if, which cannot be supposed, it were ever fully recovered. In like manner it has been shown, that when artificial nitrogenous manures were used in gradually increasing amounts, the amount of increase obtained for a given amount of manure employed, very greatly diminished when the quantity applied exceeded a certain limit, which may be called the standard of high farming; so that, a given quantity of further increase was obtained only at a greatly increased proportional cost for manure.

The general and uniform result of the whole is, that, whether we go from high to still higher farming with an ordinary rotation of crops, with large amounts of farmyard manure applied year after year for the growth of corn, or with artificial manures in gradually increasing amounts, the increase of produce is obtained for a given amount of manure applied, the greater the excess of it over what may be termed the standard of moderate high farming. I leave you to judge whether, under such circumstances, the advance from high to still higher farming is likely to compensate you for lower prices of your produce.

**A FAIRY PICTURE SPOILED.**—It was just the close of day. The west shone in scarlet splendour, and dimpled cloud-ships lay serenely clustered in sun-kissed argosies over the peaceful vale, where all was tranquillity. The robin was chanting his vespere song, and the roes dropped indolently in the balmy breeze, and seemed wafted to a realm of delicious visions. At this heaven-fraught hour I wandered down a woodland avenue with a girl whose beauty was beyond description. Her large black eyes looked fondly into mine as we sat on a fallen tree. Her soft jewelled fingers lay in mine. Oh, heavenly moment! I could feel her warm breath on my cheek, for our lips almost touched. She asked me in faltering accents, "Were you ever in love?" "Never till now," I replied. And then she looked at me most lovingly, and I drew her close to my bosom and was just kissing her for the second time, when the vision broke, and I paid the dentist and left. It was my first experience with nitrous oxide gas.

## THE AGRICULTURAL OUTLOOK.

The following is the principal portion of a paper read on Saturday, May 5th, at the Farmers' Club, Town Hall Buildings, Newcastle, by Professor Sheldon, late of Cirencester College:—

The subject I have the honour to place before you to-day is at once the most serious and the least hopeful it has been my lot to introduce to the farmers of these islands, and I address myself to it not because I like it, but because it is of supreme importance, and demands to be taken notice of. I do not claim that I am bringing before you a new question. I am only echoing the sounds that are coming up from every corner of the land; I am simply reflecting the picture which can be seen everywhere by those who look; I am but repeating truths so plain that he who runs may read them. A short time ago there were still a few persons left who affected to believe that a large portion of the complaints that are coming with startling accord from every district in the country where in a great measure attributable to John Bull's love of grumbling, and did not by any means correctly represent the true state of things in the agricultural world. But these doubters are at length silent, and it is now everywhere admitted that farmers are at last in earnest, that their complaints are genuine, and that the agricultural interest is in a seriously depressed condition. Landlords, particularly in our arable districts are made aware of these things by the farms thrown on their hands, and by the difficulty of getting in the rents of the remainder; tradesmen find them in diminished custom, and in deferred payments; bankers see them in deposits withdrawn, and in accounts closed up; and the outside world hear of them wherever they go, and read of them in almost every paper they take up. I believe I am speaking within bounds when I say that symptoms denoting a serious and near-at-hand crisis are everywhere apparent. Men much older than I tell me they have known nothing equal to the present "hard times." In the corn-growing districts the shoe has been pinching our farmers very severely for some years, and what with bad harvests and the drop in prices the position is now unbearable. It is well known to all of us how difficult it is to induce farmers to move away from their holdings so long as they can, by hook or by crook, "make ends meet and tie." This is all very natural, for there is in men's minds a strong affection for the land they till, and they part from it with the greatest reluctance and the keenest regret, many of them sticking to it and hoping all the while that things will mend, rather than give up the old home of the family, and nothing short of dire necessity or approaching ruin will drive many of them away.

"But men will break, in their sublime despair, The ties which nature can no longer bear."

This sublime despair has come over numbers of farmers in the past two years, and in some districts farms are going a begging. A Bedfordshire gentleman told me last week that in two parishes in that county the farmers were being kept on rent-free for one year, rather than they should cut themselves off for ever from the estate. And, indeed, it is a serious thing for a landlord to lose his tried and trusted tenantry. It is not necessary that I should refer at any great length to the past for points in favour of my present argument; but I may remark that while many farm products are now at as small or even smaller prices than they were a quarter of a century ago, the cost of producing them is much greater than it was at that period. Servants' wages and the rent of lands have greatly increased, and the many requirements of modern farming have greatly added to the cost of cultivation. We find that a great deal of land is being laid down to permanent grass each year, and this is done as much to diminish the expenses of farming as to adopt an easier and a simpler system. The average price of wheat from 1830 to 1844 was 7s. 2d.; from the latter date to 1858, 6s. 10d.; and from 1858 to 1872, 6s. 3½d. per bushel. Two years ago it was 7s.; one year ago, 6s. 5d.; and at the present moment it is 5s. 2d. per bushel. Barley and oats are both much lower than the average price of forty years ending in 1872, though they have not gone down so much as wheat. Beef and mutton have kept up in price better than anything else the British farmer has to sell, yet stock-rearing has paid better than stock-fattening as a rule. But take wool, which is a most important item in the sheep farmer's calculations; seven years ago it

was worth over 3s. a pound; but from this price it gradually sank to about 1s. 3d. a pound, which was considered to be the lowest figure it would go down to under any circumstances, but instead of this we find that in less than 12 months it has sunk to a price which is probably much lower than we can find at any other period in the present century, and it is now worth less than 1s. per lb., and there is no sale for it at that price. Take now dairy produce, and we find a very serious decline in prices. Five years ago cheese was worth £30 per ton more than it is at the present time, if we strike an average, and low qualities have declined much more than high ones. Butter, too, is about one-third lower than it was five years ago. Though beef and mutton have lost value less than most other agricultural products, they are no longer profitable to the farmer unless in conjunction with breeding. Thus it follows that while farmers are realising, on the average, very much inferior prices for what they have to sell, than was the case half-a-score years ago, rates and taxes are advancing at an alarming rate, rents are very high, and wages are very little reduced. As a matter of course the cost of living is somewhat lower, and in regard to this farmers are deriving a benefit equally with other classes, but as they are food-producers to a large extent, and food-consumers only to a limited one, the gain under the latter head is very small when compared with the loss under the former. The general and serious decline in prices is of course the immediate reason of the prevailing depression in agriculture, for had the decline not taken place, farmers could still have carried on; but there are various other questions involved in the subject we have in hand, some of which have to do with the decline in values, while others refer to the conditions under which our farmers have to meet whatever the "times" may have in store for them. There are certain forces at work, and the result we see around us; it is expedient that we look into the causes of the present alarming state of things, glance at some of the proposed remedies, and estimate as far as we may be able the probabilities which the future has in store for us.

## FOREIGN COMPETITION.

Foremost among the causes of agricultural decline in Britain is the far-reaching keenness of foreign competition—not competition in agricultural produce only, but in all kinds of manufactured goods. And the influence of this competition is greatly stimulated by the extremely low rates at which our shipping companies bring cargoes over the sea. One of our largest importers of American dairy produce told me last week that his cheese cost him but 30s. per ton in freight from New York to Liverpool, which is exactly what he has to pay in carriage from Liverpool to London. Wheat is brought from Chicago to New York at 6d., and from New York to Liverpool at 5d. a bushel, while the through freights on general provisions from Chicago to Liverpool average about 2s. 6d. per 100lbs. Chicago is in the midst of the great States of the West, where the bulk of our wheat, and bacon and beef come from, and from which we shall be receiving in a very short time all kinds of dairy produce as well, except fresh milk. The American farmer is on terms of equality with the British farmer in the sale of his produce, less the cost of transit and the profits of the middle-men, and these items we may put down at 1s. 6d. a bushel. But in the great wheat-growing districts of the Mississippi the American farmer has bought his land out and out for what the English pays for his land each year in rent, rates, and taxes; and there are plenty of instances on record where American farmers, when wheat was worth 7s. a bushel in England, have bought and paid for their land wholly out of the net profits of the first year's wheat, though the average yield per acre in America is only 12 bushels—this is the average of eight years since 1870—while the yield in England is more than twice as much. Though there was an increase last year of 60,000 acres of wheat in the British island, our total area under wheat is only 3,381,771 acres, while America, not to mention Canada, have 28,000,000 of acres under wheat, and over 50,000,000 acres of Indian corn; the area of land under these two crops in the United States is greater than the area of land in the United Kingdom under all kinds of crops, including permanent pasture. But notwithstanding the small increase in the growth of wheat in this country last year, English grain-growing is rapidly declining, and must continue doing so until something is done to check the decline; there are yet hundreds of millions of acres in the far West which have not yet had a plough put into them, fur



less than one-fifth of the land in the United States is at present in farms. The total area of the country is 2,311,544,959 acres, and so far not much more than 400 millions of acres are in farms. It may be said that the Americans are "killing the goose that lays the golden eggs" by ploughing their land and sowing off the corn; and no doubt this is in a sense true, but they will be scores of years yet before they have *killed all the geese*; at present they have only broken one wing. And, again, the American climate is much better than ours for restoring condition to land that is impoverished by over-cropping. Though the average yield is more than twice as large per acre in this country as it is in America, and though American heat has to pay 2s. 6d. a bushel in carriage and com missions in its way to this country, still the American farmers can make money by wheat growing, when British farmers can do nothing of the kind, for the latter are handicapped in other ways far more than the former are in the items I have mentioned. It must not, however, be supposed that at the present low prices of wheat, American farmers are growing wealthy. On the contrary they are complaining loudly that their profit is cut off. One of the best agricultural authorities in America, Mr. Willard, writing to me under date, March 9th says:—"Our dairy industry is much depressed but still is better than many other branches of farming." Speaking of the state of New York he says:—"Real estate has depreciated greatly during the past year. Farms held at £50 per acre would not sell for more than £30." It must be remembered that in the State of New York, chiefly on account of its dairying advantages, land has hitherto commanded, at a rule, very much higher prices than in the Western States; but the latter are now going extensively into dairying, an industry to which it was thought they were not adapted, and it is to their smart competition that the drop in value of land in the Eastern States is chiefly due. Not England alone, but France and Switzerland, Canada, and even portions of the United States are suffering from the powerful rivalry of the Western States of the Union. America competes with us now in all sorts of grain and dairy produce, in beef, mutton, pork, bacon, in live cattle, and in horses. In 1869 she sent us 17,000 tons of cheese; last year, 52,000; in fresh and salted beef, and in live fat cattle, she exported last year no fewer than 300,000 head of cattle; she is by far our greatest competitor in the production of food, she is rapidly increasing her lead, and soon she will be able to supply all our wants; but she too, is suffering severely from low prices, the result, in fact, of her own enormous production of food. Our colonies, too, are sending us very large quantities of food and of other produce that competes with the British farmer. The chief want in the various countries from which our supplies come is money. Their surplus products are no use whatever to them, only to turn into money. Our money they want, and our money they must have on some terms, and if they cannot sell us their wheat 4s. a bushel, they must sell it to us for whatever price we will pay. But there is a limit below which even they cannot afford to grow wheat, and that limit is almost as nearly reached as it is in England.

#### RESTRICTIONS ON FARMERS' ENTERPRISE.

But it is not only foreign competition that is ruining the agricultural interest of this country. We must remember that on very many estates farmers are treated as if they were children, unfit to manage their own business; and on some estates they are treated as if they were not to be trusted. I refer now to the harassing restrictions on cropping and selling off, by which farmers' hands are tied behind their backs. Fifty years ago there was a certain amount of reason in close-fisted covenants, but in these days of purchased feeding stuffs and manures, the restrictions are simply absurd and intolerable. When farms were self-supporting, when no manures or feeding stuffs were used on them except those produced on them, it was possible to injure a farm by indiscriminate cropping and disposal of produce; but now the whole state of things is completely changed and the old fossilised farm covenants are as much out of joint with the spirit of the present age, as an Egyptian mummy would be if you could galvanise it into life again.

Mr. SHELTON then advocated the abolition of the laws of Distress and Hypothec and the Game.

#### TENANT RIGHT.

The absence of a compulsory law of tenant right is another injustice under which the farmers of these islands are com-

pelled to sit down, and like the laws of Distress and Hypothec it diminishes the farmer's credit. The Agricultural Holdings Act remains one of the greatest legislative shams of the age, so far as operation is concerned, and it is not likely to be improved; for only recently Parliament has refused to grant leave for an inquiry to be made into its working. This looks as if they who passed it are not proud of it; and it also denotes that we shall have to content ourselves with the shadow instead of the substance for some time longer. When the farmers of the United Kingdom have learnt to act together, and when they are correctly represented, Parliament will pay due attention to agricultural interests. This depends wholly on farmers themselves.

#### FREE TRADE.

I come now to the question of free trade, and I beg, in the first place, to say that a return to protection is impossible in this country. There is neither right nor reason in wishing to place an artificial value on the first necessities of life in order to protect the interests of any one or two classes in the land. Farmers have no right to make other classes of our people pay more for the food they eat than foreign nations are willing to sell it to them for; and landowners have no right to maintain land at a fictitious value in order to keep up their own incomes, if by so doing they increase the cost of living in the country. Mr. C. S. Read declares that the present depressed state of agriculture is the natural result of the development of the free-trade legislation of thirty years ago. Gentlemen, I beg to submit to you my belief that this notion of Mr. Read's is wrong, and I say so with all due respect to the hon. gentleman. I believe it is unfair to lay the present depression at the door of free trade. But if the depression is really due to free trade, what is the unexampled prosperity of the past quarter of a century due to? Free trade did not create the present agricultural distress, and protection could give only temporary relief, and we must remember there was plenty of agricultural distress before free trade was invented. The present depression in agriculture is owing to a falling off in demand for food. The falling off is due to diminished trade and commerce, which in their turn are due to several causes—to wars and rumours of wars, to strikes and lock-outs, to the inferior quality of manufactured goods which strikes have compelled our manufacturers to resort to, to foreign competition in cheaper and better goods, and in some measure to over-production in several branches of the manufacturing industries of the country. The only thing in which farmers have a right to demand the abolition of free trade is the one article of disease; they have no right to abolish it in respect of food, and it would not benefit them to do so with regard to manufactures, except by keeping more money in the country. No Government in this country, be it Liberal, Conservative, or Non-descript, will venture to abolish the measure of free trade that the country possesses; but if these hard times continue, and there is every probability they will try the political faith of free-trading landowners; for one of two things is inevitable—either a return to protection, or a great drop in the value of land. A political, as well as a commercial crisis is on us, and it will turn on this question, in a great measure.

#### PROPOSED REMEDIES.

Various remedies for the deplorable condition of agriculture in Britain have been proposed, but I have not space to consider them at length. Some suggest that we should by higher farming raise bigger crops than we have been doing. This suggestion, I believe, is scarcely a practical one at the present time, because at present prices the growing of bigger crops, by the aid of purchased manures would at best be like giving change for a shilling, and in many cases would be like giving fifteen pence for the shilling. That the land of England is capable of yielding more food is no doubt true, but the question is, would the extra food repay the extra cost of production. But what inducements have farmers to farm more highly than they have been doing? What with harsh and ignorant restrictions, and with want of due security for capital, the wonder is that they have farmed as well as they have. It is abundantly evident that farmers have had more trust in landlords than landlords have had in farmers, or the land of the country would have been in a far worse condition than it is. If the food-producing capacity of the country is to be increased, if manures and feeding stuffs are to be extensively employed, and if British agriculture is to be saved from permanent decline, capital must be attracted to farming by giving security equal to that offered

by other branches of industry, and by removing vexatious restrictions and monopolies. On the breeding and rearing of stock, many say that early maturity is a *sine qua non*, and no doubt this is strictly true. Others think dairy farmers should copy continental nations in dairy products, that they should make the French Roquefort, the Swiss Gruyere, or the Italian Gorgonzola cheese, as well as other fancy goods. Probably something might be gained this way, but the limit would soon be reached unless we could give to Englishmen the tastes and fancies of foreigners. But in any case one thing is clear—we must improve the quality of our dairy products, either on our own or on foreign models, for we are beaten by Swiss and Italian cheese, and by French and Danish butter.

#### WHAT THE FUTURE HAS IN STORE.

It is sufficiently evident that British farmers cannot compete with countries where cheap land abounds, unless they have more liberty and fairplay. Handicapped as they are with taxation and rates, both of which are excessive, it is impossible they can pay their way unless harassing restrictions and agreements are abolished, security is given for unexhausted improvements, and protection is afforded against the ravages of game and of foreign contagious diseases. It is also evident that, except in case of war, grain-growing will not again become a very profitable branch of farming in these islands. Many foreign countries can grow it much cheaper than we can, and some of them can produce a much better quality. We shall have to turn our attention to those things in the production of which we have natural facilities equal or superior to foreign countries, and we must give up the competition where it is unequal. Dairy farming, stock breeding and fattening, sheep farming, and live stock generally, provide in the future the most profitable pursuits to which the British farmer can devote himself, and land that is adapted to these things will decline less in value than that which is not. One of the chief branches in the future is the milk trade. This must be carefully cultivated to the utmost limit by always supplying the public with a fresh and genuine article. I believe the milk trade is capable of being very greatly extended, providing milk salesmen are honest to their customers, and if they are not the law for their own sakes must make them. In Dorsetshire perhaps the finest butter in the world is made—in limited quantity. But France, Denmark, Germany, and Holland are now sending us large quantities of butter which is superior to the great bulk of our own, and commands a better price. Plenty of Dutch butter is sold for Dorset in London, and some of our great hotel-keepers import their butter direct from Normandy, because they cannot get English butter fine enough. Now, it is a fact that our soil and climate will produce as fine butter as any in the world if only we take pains enough in making the butter. That the great bulk of the highest priced butter comes from the continent is not only a loss but a discredit to England, and it is high time that we changed all that. Butter making, in conjunction with stock raising, to which it is very well adapted, can be made with due care, cleanliness, and intelligence, one of the most profitable pursuits to which our farmers can turn in these precarious times, and I would strongly urge this matter on the notice of dairy farmers. Cheese making is in a very depressed condition, yet the best qualities are still making over 80s. per cwt., while inferior goods fetch 20s. and upwards—an enormous disparity which is chiefly owing to mismanagement. One of the first objects of producer and dealer alike, should be to induce people to buy even more than they want by offering to them a tempting and superior article. Hence milk should be sold perfectly fresh and pure, and cheese and butter should be as good as possible. Our wheat cannot be much improved; this is a question of climate, in which such countries as California and Australia have a great advantage over us.

The speaker then advocated a reduction of rent, and concluded thus:—

When wars and rumours of wars had passed away, when the necessary agricultural reforms are secured, when our manufacturers improve the quality of their goods and when trade revives, then farming will improve; but now is the time that farmers should understand each other's need, common suffering should teach them mutual reliance, distrust should vanish utterly, and they should be united, firm, and temperate in their demand for those reforms that alone can avert a collapse, the consequences of which will outlast the present generation. The outlook is serious.

## FARMERS AND THE INCOME TAX.

*Pro Bono Publico* writes as follows in a Wakefield paper the name of which we have omitted to preserve on the cutting from to which our attention has been called:—

In the House of Commons last week Colonel Barnes asked the Attorney General whether, supposing a tenant farmer could prove to the satisfaction of the Income Tax Commissioners that he had made less profit from his farm than half his rent, he could get an abatement from his income tax; and, if he could show that he had made no profit he could get entire remission, either by the Act 14 and 16 Vic., c. 12, s. 3, or any other act. The Attorney General said that, by the 14 and 15 Vic., c. 12, sec. 3, and the 16 and 17 Vic., c. 34, sec. 46, there was no doubt that a tenant farmer could obtain an abatement of income tax on satisfying the Commissioners that such ought to be made; and, if he made no profit at all, he was entitled to a complete remission of the tax.

The profit accruing to occupiers of land is determined by the Legislature, as a general rule, to be one-half the value of such land; but it is very little known that tenant farmers are entitled to the relief referred to; and if at the end of the year of assessment, ending 5th April, a tenant farmer finds that his profits for the year have not amounted to the sum assessed under Schedule B, he may give notice to the Surveyor of Taxes of his desire to appeal, and on production of a Dr. and Cr. statement, prove the facts to the Commissioners within three months of the end of the year of assessment (5th April), when the duty paid in excess under Schedule B will be certified to be repaid to him (3rd sec., 14th Vic., c. 12). This provision, which previously only extended to tenant farmers who obtained their livelihood solely by husbandry, is now extended to all tenant farmers in respect to the profit of lands occupied for the purposes of husbandry only (46th sec., 16 and 17 Vic., cap. 34). As an example, the following case, published in the "Popular Guide to Income Tax," may be an assistance to those desirous of appealing:—

A tenant farmer was assessed for 1872-3 under Schedule B, on a net assessment of £560; rent being £600, tithes £40, total £640, less the usual deduction of one-eighth; £560 at 2d., or £280 at 4d. in the £, is £4 13s. 4d., the duty paid. He appealed at the end of April, 1873, when he produced the following statement, supported by vouchers:—

Receipts.	£	Payments.	£
For stock sold.....	300	Year's rent .....	600
Estimated value of sheep,		Tithes .....	40
&c., in stock.....	50	Stock purchased .....	240
Wool.....	40	Seed do. ....	90
Wheat .....	360	Manure.....	50
Barley .....	250	Interest on £500 at 5 per	
Other produce .....	160	cent. on farm stock,&c. *25	
Seed in stock.....	20	Incidental expenses .....	40
Profits from poultry.....	30	Labour .....	200
Balance, being loss.....	76		

1,285

1,285

The household expenses were entirely defrayed out of the private purse of the occupier. The Commissioners, being satisfied with the statement, discharged the assessment, with the exception of the tax on the interest, £25\*, which should be deducted from the receiver thereof, and granted a certificate for repayment of £4 5s., being £4 13s. 4d., the duty paid, less 8s. 4d. the tax on the £25, at 4d. in the £.

#### INCREASE OF EMIGRATION FROM THE MERSEY.

The returns of emigration from the Mersey during the month of April, which were issued on Saturday, show an enormous increase. It appears that 65 vessels left the Mersey last month with 10,917 passengers, of whom 5,348 were English, 58 Scotch, 1,546 Irish, 3,800 foreigners, and 156 whose nationalities were not known. Their destinations were 8,931 to the United States, 1,723 to British North America, 48 to Australia, 110 to South America, 39 to the East Indies, 12 to the West Indies, 9 to China, and 44 to the West Coast of Africa. A comparison shows that the figures of last month were 6,015 over those of the previous month—March—and 4,090 over April, 1878. Emigration during the present month has also been carried on very briskly, and if continued the numbers will be several thousands in excess of the figure of corresponding months for many years past.

## MR. BLENNERHASSETT ON THE LAW OF DISTRESS.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—The debate on the motion of the Irish member on English law revealed an amount of omniscience *de re rustica* which “darkened counsel by words without knowledge.” Knowing the law of Scotland on hypothec and of England on distress, perhaps I can throw some light on it. Every writ and every legal process in Scotland is served and carried through by public officers, who have to find security for the faithful discharge of their duties. In England anybody may execute the most critical functions of the law. I have not a word of apology for the monstrous folly of letting a landlord at his own hand thrust any ruffian into another’s house, place him in possession, keep him there, and then sell this tenant’s chattels very much at his own discretion. In Scotland a petition to the Judge-Ordinary is presented, stating the grounds of claim, and craving judgment. Simultaneously the Clerks of Court proceed to the premises, take an inventory of the goods and chattels, lodge it in the court, and retire. The petition is served on the tenant, a summary answer required, and if the rent be due and unpaid a warrant of sale is issued to the Clerks of Court. A man in possession is never thought of. This ought to be the procedure in England; but the want of local courts and the utterly barbarous forms of process have hitherto precluded that reform. The preferential right of hypothec exists only for one year’s rent—that of distress is for six. The latter should be reduced to eighteen months, or perhaps two years. With stringent and undoubted securities against collusive and fraudulent claims by strangers to property actually owned by the tenant, the chattels of others accidentally on the premises ought not to be liable to distraint. I frankly make these concessions to the opponents of the law, while I am more satisfied than ever that the principle on which the law rests is wise, just, and politic. Strange to say, the principle was not so much as hinted at in the debate of the “collective wisdom.”

The relation of landlord and tenant is created by what the law calls contract of location or hire. The land is not transferred to the tenant, any more than a Hansom cab to the man who hails it off the stand. He occupies the cab just in the same sense and no other in which the other occupies the farm—the possession is retained by the owner—only the use or occupation *pro tempore* is transferred to the hirer. The price of goods is due the moment they are transferred to the purchaser. Rent is not exigible until six months or twelve after occupation has commenced. Before rent is payable, the landlord must stand by, and may see a stranger sweep everything off the premises by a bill of sale, a bill at sight, a consent to enter judgment, any collusive process by which distraint can be matured before the rent falls due. But the great argument in favour of the Law of Distress is the peculiar nature of the farmer’s calling. He must plough and sow before he can reap. He must spend largely his capital the first year, knowing that nothing can come in until the second or even the third. Sometimes, as at this very moment, he must see one bad season after another, for four successive years, disappoint all his hopes, and thwart all his plans. This is not the fate of the needy man alone, but of the man who has entered on the land with ample capital. It is absolutely certain that good seasons *must* at either one time or another come round—that one of these will more than repair the losses of the other three, and that a second will fill the patient and hopeful tiller’s pockets. The whole business of farming absolutely turns upon that hypothesis—that success in culture depends upon a far-seeing calculation of the effect of operations spreading over a series of years. While all this is going on, he is giving a living to his

labourers, he is greatly adding to the fertility of the land; perhaps he is thorough draining, knowing that “in due season he will reap if he faint not.” It is for the interest of his landlord that this should be so—to forbear is to save and keep himself—the security of distress enables him to afford to give the tenant such time as he wants—and while he holds off, no other creditor can make his swoop. But withdraw the landlord’s protection, let any man who has a claim on the farmer come down on him in the midst of operations which time, and considerable time, alone can fructify—arrest his waggons in the hayfield, or his horses at the plough, suspend all the work of harvesting by a warrant to seize all the implements—the reaping machine or the corn cart—and just when the fat kine are about to supersede the lean, the whole calculated arrangements whereby success and fertility were about to fall into their natural place, may be thwarted by the needy, obdurate, or the unreasonable, and outside creditors, having no security against the action of each other, may ruin in a month the well planned work of years. This, as Irish members stated, is so well understood by the tenantry of the sister kingdom that they look to their landlord and the Law of Distress as their protection against the harsh cupidity of outside creditors. Nor does this concern individuals alone. The land and its fertility are involved in the result. Hand-to-mouth culture—tillage that cannot afford to wait the revolution of the seasons and the effect of plans and operations laid and adopted long before, is ruinous to the soil in which the whole nation has an interest. There are at this moment, in every county in the realm, husbandmen who began years ago with ample capital and laid it out freely in the confident assurance of an ample return, who, unless they are allowed to go on until good seasons come, as at some time (I believe now), come they must, will inevitably “fall to careless ruin”—but who, maintained in their position, are certain to retrieve it. The fitful and uncertain action of the seasons, both here and abroad, is another element in the solution of the question. A creditor may force the tenant to sell his grain, his cattle, sheep, hay at half the price which by waiting the turn of the market he might ultimately realise. Wheat before now has fallen in a few weeks from 80s. to 49s., and a rainy June has run up old hay 50 per cent.

I give landlords no credit for forbearance. It is clearly their interest, and they lose nothing by it. I blame no creditor for cupidity in using the law to get what is his own. But I maintain that in so far as the interest of the land, of the labourers on the farm, of the farmer himself, are concerned, the Law of Distress is not merely an advantage but an indispensable necessity.

I am, Sir, &amp;c,

SIDNEY SMITH.

*The Manor, Feltham, 19th May.*

A FAMOUS DOG.—Once there was a man in Minnesota who had a dog. He bragged of that dog; he did. There was no beast of the field, or of the forest either, who could hold up against him. And bears! oh he was great on bears! That was his particular game. He was a terror to bears, that must be admitted. He was rather sorry for it, too; he was afraid that terror was making bears rather too scarce in that region. One day he met a neighbour. The neighbour said, “That is a great dog of yours.” “He just is,” replied the owner. “Have you perceived him lately?” “I saw him about half an hour ago,” answered the neighbour. “He was havin’ a great time with a bear.” “You bet?” cried the owner; “and which bear?” “Well narry one of them was best, but the dog was beatin’ the bear.” “Of course; but why didn’t you help him?” “Cause they were going too fast. It wasn’t a fight; it was a race, and your dog was ever so far ahead. He was just gettin’ into Iowa when I see him.”—*American Paper.*

## THE LAW OF DISTRESS.

We can only find space for a portion of the recent debate on the Law of Distress:—

Mr. BLENNERHASSETT rose to call attention to the Law of Distress for rent in England, Wales, and Ireland. The hon. gentlemen then proceeded to give a brief history of the origin of the various forms of distress, observing that his motion was confined to the power enjoyed by the landlord to distrain for non-payment of rent in the case of agricultural holdings. Although the remedy was ancient the peculiar form which it now assumed was of comparatively recent introduction, and was entirely different, in fact, from its original character. But be that as it might, the real question which the House would have to decide was, whether the Law of Distress, whatever might be its history, was suited to the circumstances of the present day—did it promote or hinder agricultural improvement? The first thing that must strike one in considering the subject was the highly exceptional character of the law. As had been well said by Mr. Howard Taylor, it was not only a class law, but a class exception from law, rendering the landlord, as compared with ordinary creditors, a chartered libertine. The practical evils resulting from the arbitrary and ill-regulated nature of the proceeding by distress were clearly pointed out to the select committee of the House of Lords which sat in 1869 to inquire into the Law of Hypothec. In giving evidence before the committee Sir H. James had pointed out the inconvenient operation of the Law of Distress, and Lord Moncreiff had shown the milder consequences of the Scotch Law of Hypothec; in fact, they had both concurred in describing the existing practice so anomalous and anachronous. The Law of Distress was peculiar and exceptional, inasmuch as it gave a preference at one class of creditors over all others. Between it and the Law of Hypothec the difference was one of degree, the principle of both being the creation of a preferential claim, though an attempt had been made before the select committee to show that similar claims were allowed, in similar cases, by the commercial law of this and other nations. Great stress had been laid on that supposed analogy, which might be shown to have no foundation in fact. The instances were cited of bottomry bonds, and the lien of shipowners on the cargoes of their ships for freight; but both distress and hypothec had a totally different origin and proved on examination to be also different in their nature, so that a singularly vivid imagination was required to trace a resemblance between them. Liens and bottomry bonds were justified by necessity, which certainly did not exist in the case of distress, as the landlord's position was so secure and his possible loss so small that there could be no reason for allowing him a preferential claim. (Hear.) Not a few arguments, however, were advanced in favour of the Law of Distress. The most important was the fact that a landlord, unlike a merchant, who could refuse further dealings with a customer whose solvency he suspected, parted with his land for a definite term of years. There were, no doubt, certain peculiarities in the landlord's position, and care should be taken in dealing with his preferential claim not to leave him at a disadvantage as compared with other creditors. One peculiarity arose from the rule of law that rent did not become due till the end of the day on which it was made payable, so that other creditors had the start of him. The power of distraint, however, was no protection against this, and an easy remedy was to be found in making an agreement that the rent should be payable before the lapse of the time for which it was to be paid; or rents might be received at shorter intervals. Another peculiarity of the landlord's position was the difficulty and delay in getting possession when the rent was not paid. But this point he would leave to the hon. member for South Norfolk, who had an amendment on the paper. With a few small changes in the law the abolition of distraint would place the landowner under no disability as compared with other creditors but would leave him still in the possession of several advantages. But what would be the effect upon the tenant? It might be urged that landlords would require payment in advance. But he did not think that such a precaution would often be found necessary. It was to be observed that in many places a system of tenant-right had grown up along with yearly leases, and this formed an important security for

the rent. The tenant would, no doubt, lose the extra credit with the landlord which he now enjoyed; but for this advantage he paid dearly. Preferential security to one creditor involved a risk to all the others, and extra credit with the landlord entailed a loss of credit with every other person with whom he dealt. He held that the influence of distraint in stimulating an unhesitant and unswerving competition for land and in raising rent above its natural economic level was extremely mischievous. No one could desire on public grounds that land should be let for less than its full value, and it was no part of the duty of the State to encourage a landlord to accept less than a full rent for his land; but where rent was determined by competition, sound commercial principles should prevail. Protection should not be given to the owner of a certain commodity by which he might be led to neglect the ordinary precautions of business, and grasp at a price which was not justified by the circumstances of the property which he had to dispose of. The landlord's priority was a premium held out to him by the State to neglect the ordinary precaution of selecting suitable tenants with adequate capital; and it was also a direct inducement to persons to enter into a reckless competition for the hire of a commodity which they were not in a position to employ, either with profit to themselves or advantage to the country. Among those who agreed with him in these views was Mr. W. Scott, of Timpendean, one of the most successful farmers in Scotland. What he and his supporters objected to was a law which afforded the landowner special immunity from the results of want of care and prudence, and which encouraged him in a course of proceeding which pressed hardly on the competent and solvent farmer, and was highly injurious to the general interests of agriculture. But there were other persons to be considered besides landlords and tenants. If the landlord's claim on the estate of an insolvent were paid in full, the dividends applicable for the discharge of all other claims must, of course, be diminished. Nothing in the Law of Distraint offended more strongly a man's ordinary sense of justice than the consequences which proceeded from the principle that it was the place where they were found and not the persons to whom they belonged that rendered things liable to distress. It was hard that agricultural implements, manures, and other property that had not been paid for should be distrained for the rent of land on which they were found; but it was harder still that cattle and sheep sent upon a farm for temporary purposes and which were not the property of the tenant at all should be seized and sold for arrears of rent. The abolition of the Law of Distress, he contended, would conduce not only to the general welfare of the community, but also to the true interests of the landowner. In proof of this he quoted the evidence of Mr. James, who stated that the mortgagees did not look to the rent he could get by distress, but to what he could realise by bringing the property into the market and selling it after foreclosure. Mr. Scott, of Timpendean, gave similar evidence. There was only one witness examined who was of a different opinion, but he was so anxious to prove too much that his evidence was without value. He altogether denied that the abolition of distress would injuriously affect the power of raising money on landed security. The interests of the landlord were inseparably connected with the general interests of the community. Wha ever either promoted or obstructed the one promoted or obstructed the other. If the maintenance of this law was injurious to the interests of agriculture, it was necessarily also injurious to the interests of the landowner rightly considered. The Law of Distraint held out a premium to landowners to accept as tenants persons with insufficient capital; and nothing could be more injurious to the interests of agriculture and of the country generally. The example of foreign countries had been appealed to in this matter. Mr. Carlisle, the legal adviser of the British Legation, said: "The general tendency and spirit of the legislation of late years had been not only to abolish this summary remedy, but to place landlords quite on the same footing with other creditors, leaving the parties to make their own contracts in their own way touching security for the payment of rent." In Ireland this law was limited to one year's rent. On well-managed estates the power was never put in force; but in the present depressed state of agriculture there was some apprehension that the rusty weapon of moral tyranny might again be drawn forth. But, so far as he was aware, the better class of resident landowners and agents did not consider the main-

tenance of this law necessary for their protection. As to the amendment of which the hon. member for South Norfolk had given notice, no doubt its effect would be to substitute certain modifications of the law for a definite and comprehensive proposal that the law should cease to exist. It was not easy to comprehend the position of the hon. member for South Norfolk. At a recent meeting of the Central Farmers' Club he was reported to have said:—"My opinion is that the Law of Distress is wrong in principle. It allows a man to be his own avenger, which is, I consider, contrary to the spirit of our laws altogether. It also allows him to be an avenger of his wrongs in private."

I contend that the law is worse in principle than the almost doomed Law of Hypothec in Scotland." (Hear.) But the amendment of the hon. gentleman objected to the abolition of a law which he considered wrong in principle and altogether contrary to the spirit of our laws. The hon. gentleman voted for the abolition of the Law of Hypothec and he said that the Law of Distress was worse. (Hear.) In conclusion, he called upon the House to adapt its legislation to the circumstances and wants of the time, and boldly and promptly, but with true prudence, to efface from the statute-book a law which was opposed to modern ideas and unsuited to the conditions of modern industry. He begged to move,—"That it is desirable that the power of distraint for the rent of agricultural holdings in England, Wales, and Ireland should be abolished." (Hear, hear.)

Mr. B. WILLIAMS, in seconding the resolution, said that no one could justify the Law of Distress. It enabled the landlord at his own will to enforce the payment of a debt which he thought due to him by the tenant, to be judge in his own case, and also executioner. (Hear, hear.) The Law of Distress originated at a time when the tenant was bound to his lord not only as regarded his goods but his personal liberty, and it would never have continued to this day had not the landlords of this country exercised their rights with singular forbearance. (Hear, hear.) That the law was unequal and that it sometimes produced real injustice no one who attended our law courts could deny. When the law was enforced the tenant was perfectly helpless. It was true there was the remedy of replevin, but it was a cumbersome, expensive, and dilatory process, and often involved the tenant in long and useless litigation. Whatever claim the tenant might have against the landlord, if any rent was due the landlord had the right to enter and distrain. The law with regard to excessive distress had been laid down entirely in favour of the landlord. Mr. Justice Bailey had said,—"The landlord is not bound to calculate very nicely the value of the property seized, but he must take care that some proportion is kept between the sum he is entitled to levy for and the sum he is entitled to take." And Baron Parke had ruled still more tersely,—"To determine whether the distress was excessive, you must ascertain what the goods seized would fetch at a broker's sale." The landlord, acting on that view of the law, could seize large portions of the tenants' property and confiscate them. The difficulties of the tenant had been increased by the Judicature Act of 1875, which enabled the landlord to reply to the tenant's action for excessive distress by allegations of breach of covenant or bad farming. Counter-claims of that kind ought to be regarded with jealousy by the Courts as the suggestions of legal ingenuity, but unfortunately they were not. A case came before him last year in the course of his professional practice, in which a distress was levied on a large farmer in the north of England, who had a valuable stock on his farm, and the property was sold in a most wasteful manner and for most inadequate prices. The tenant, acting on advice, brought an action for excessive distress, and the landlord brought a counter-claim for bad farming and breaches of covenant. The case occupied some days, and the judge was not able to complete it because he had to go elsewhere, and at the last moment the tenant was obliged to accept £400 by way of compensation, each party to pay his own cost. The £400 was not more than enough to pay the lawyer's bill. (Ironical cheers and laughter.) The result was that the tenant was ruined by the wasteful sale. In cases where land in Ireland had fallen into the hands of speculators the Law of Distress had been frequently exercised with great severity. Although he fully admitted the evil that would result to the tenant if he were allowed to enter into possession of a farm unless he had sufficient capital to cultivate it, he contended that capital would not find its way into the land unless the

tenant's holding were secured, and unless the landlords would consent to give up their privilege of distress and to grant long leases.

Mr. READ, who was suffering from a severe cold, said that he had lost his voice through attending a temperance meeting ("Hear," and laughter). Possibly that circumstance might excite some sympathy on his behalf from hon. members opposite, although he did not look for much pity from those around him ("Hear," and a laugh). He desired, however, to utter a few inarticulate sentences in defence of the amendments on this subject which he had placed upon the notice paper. In his opinion, if the Law of Distress were to be retained it must be amended in some way or another upon the lines of his amendments. The harsh operation of the present Law of Distress had been brought more fully into notice of late in consequence of the bad times the farmers had been passing through. Not long ago a landlord who had allowed his tenant to get several years into arrears with his rent waited until the sheep of a neighbouring farmer were sent on to the farm to graze, when he at once put in a distress and sold the sheep for £400. It was a remarkable proof of the good sense, the justice, and the moderation of the landlords of England that they very rarely put that extraordinary law into operation. He might be asked why he did not advocate the total abolition of the Law of Distress? His answer was that that law was so interwoven with our agricultural system that its total and immediate repeal would give a very great shock to all who were concerned in agriculture, and would be detrimental, especially in times of depression like the present, alike to the landlord and the tenant. (Hear, hear.) If they were to abolish that law at once, they must, according to all precedents, exempt existing tenancies from the operation of the new Act; but, on the other hand, if they simply modified it as he would suggest, it might be applied at once to every holding in England. His suggestion was that the landlord's right of distress should only extend to one year's rent. That was the law of the land in the case of bankruptcy, and he did not suppose that a landlord would distrain on a tenant unless the latter were more or less insolvent. The rents in annual tenancies were generally due half-yearly, and payable as a rule in England some three or four months after they became due; and if the landlord wished to be generous to his tenant and allowed more than two half-years' rent to be in arrear, he might take his share with the other creditors for anything over and above one year's rent. His next suggestion was that the stock of a third party taken on a farm to graze should only be liable for the amount of consideration payable for the grazing. That was derived from the Hypothec (Scotland) Act of 1867; it had worked remarkably well during the last 13 years, and there was no reason why it should not be equally good for England. In these times of depression the capital of the tenants had been so reduced that many of them could not stock their land, and the only way in which the landlord could get his rent was by enabling the tenant to take to graze on his farm the stock of other people. Machinery such as thrashing machines and steam-ploughs, which was often let out, was liable to be seized if it happened to be on the tenant's land, whereas it really ought to be exempted. Then, with regard to the right of re-entry, if the landlord could not get his rent he ought to have his land and to have it at once. (Hear, hear.) He believed it often took a landlord months to eject a yearly tenant and obtain possession of his land. It was a roundabout, tedious, and expensive process, and he thought it ought to be both quick and cheap; quick if he was dealing with a fraudulent tenant, and also cheap, or the remedy would be worse than the disease. A distress should also be executed by a responsible public officer only. With respect to agricultural leases, if the tenant became insolvent during the time he occupied the farm he was made a bankrupt and the trustees could not carry on the farm. The landlord could enter immediately on the farm and could also seize all the growing crops. Cases of that kind had recently occurred; and a landlord had begged not only the whole of his rent, but something like £800 worth of hay and turnips that were on the land. He had mentioned the matter to the Attorney-General, who had promised to take it into consideration when the Bankruptcy Bill came under discussion. In conclusion, he hoped the House would favourably consider his suggestions, which he was now precluded from formally moving as amendments. (Hear, hear.)

Mr. J. W. BARCLAY said he felt considerably surprised

at the views of the hon. member for South Norfolk (Mr. Read) as embodied in the amendments he had placed on the paper, for although the change he proposed would favour to some extent a tenant's creditors, their effect would be prejudicial to the interests of the farmers themselves. To limit distraint to one year's rent would simply be to limit the indulgence which landlords would give their tenants, and it would be a conclusive answer doubtless, by a land agent to a tenant desiring delay for more than one year's rent, that Parliament, by the change proposed, had precluded the landlord from giving it. To give greater power of security to the landlord would simply be to give him more summary means of ejecting the tenant which seemed wholly unnecessary, so long as the landlord had the preference to a year's rent, and one year would practically give him a preference to two years' rent. The amendment might be accepted as evidence of the disinterested character of farmers' parties, for they showed that they were ready to look after the interests of their landlords and creditors before their own. As Mr. Read had remarked, this question of distress and its effects was new to English farmers, but farmers in Scotland had long ago made up their minds about the Law of Hypothec, which was the corresponding law in Scotland, and the same in principle. He would state as briefly as possible the objections to the law, which were much wider and deeper than it at first sight appeared. The land of England was a monopoly in these respects at least, that the quantity to be leased was in the hands of very few, and that however great the demand, the quantity could not be increased. The agricultural population naturally increased, and in these circumstances competition was maintained at a maximum, and tenants' profits at a minimum. But as if the excessive competition, inevitable in the circumstances, was not enough, it was still further miscarried by the Law of Distress which enabled the landlords to accept as tenants, or at least as competitors for farms, men who had not sufficient capital for the farm. That was the argument put forward by landlords and land-agents in defence of the law as it stood. It was not because they had any favour for the poor man, but because the man with inadequate capital offered a higher rent, or was willing to submit to more onerous conditions in the lease. These circumstances explained why tenant-farmers frequently submitted to onerous, in many cases monstrously unjust and even absurd conditions in leases. The onerous principle of the law was that the landlord was protected against the consequences of his own imprudence, and it might be greed. Even if the landlord accepted a doubtful tenant because he promised a higher rent, or because he submitted to onerous condition it might be with regard to ground game, this Law of Distress secured the payment of the rent. It was evident that the amendment to restrict the distraint to one year's rent, would not meet this, the principal ground of the farmers' objection to the law. The injustice of the law to creditors and others dealing with the tenant was very obvious. The landlord who asked only for his interest and not his capital was paid in full, when other creditors who asked both capital and interest had to take a dividend or perhaps even get nothing. The landlord in his (Mr. B's) opinion had grounds for complaint against the law, and if they had not complained already he expected they would begin to do so by-and-bye. So long as prices of agricultural produce continued to advance, as was the case for a good many years, tenants with inadequate capital might manage to get on, but when bad seasons and lower prices came, landlords would find that the high rents promised by those tenants with inadequate capital were delusive. The tenants might hold on for a year or two, but they did so at the expense of the farm, which would ultimately fall into the landlord's hands in a condition which he would find very prejudicial to its being re-let. Landlords under such experience would begin to have doubts as to the wisdom of their land agents in increasing the rent roll by accepting tenants with limited means, who when reverses came were unable to hold their position and do justice to the land. Land agents were the only people who got advantage from the law, because it was only by means of this Law of Distress that the control of large estates could be kept in lawyers' offices, the people who know little, if anything, of farming. It was thought all right if the rent roll were increased and the rent collected. The Law of Distress enabled them to do both. As for improved cultivation, they as a rule did nothing for that. It was thought that by antiquated and obsolete covenants in leases tenants could be prevented from exhausting the land; but he never saw covenants which would

prevent a tenant from exhausting his farm if he set himself to do so. Such covenants, together with the want of compensation for improvements, were the great obstacles to improved cultivation. They tied up the hands of the intelligent and skilful farmer from making the best of the land for himself and the landlord. The abolition of distress would do much to improve this state of matters, but no modification of it, as suggested by Mr. Read, would be of any avail. The restriction to one year's rent would simply make the land agent more stringent with his tenant, and he therefore strongly supported the motion for total abolition of the law, giving the landlord reasonable powers of re-entry when the tenant had become insolvent and unable to discharge his obligations.

### THE LAW OF DISTRESS.

The following letter appeared in the *Newport and Market Drayton Advertiser*.

As I have recently experienced its baneful effects, I think I cannot do better than give you full particulars of my case for the benefit of others that might get into the same trouble. In November last, I attended a sale under an execution from the sheriff. I bought many articles and also the eating of the roots, hay, and straw. At the conclusion of the sale, I inquired of the auctioneer if there would be any risk in my bringing stock, &c., on the place to eat the keep. He told me he would refer to the law on the subject, and write me which he did, saying that I might send anything on to the premises, that I should be perfectly safe, that no one could distraint upon my goods, or anything that I bought at the sale, not even the landlord. Consequently I sent fifteen head of cattle, &c., and commenced consuming the roots, &c. I also saw the tenant, his wife, and son, all of whom assured me they were going to keep on the farm as before. I also saw the agent, and asked him if it was correct that they were going to stay on, and he told me it was so. Having afterwards heard some little talk that the tenant would not stay on, I thought I would see the agent again. I did so. I asked him again if it was true that the tenant was going to remain on the farm. His answer was "Yes," and that the father was going to pay the rent, and that he had drawn out a fresh agreement for the tenant to sign. A few days after this last assurance, I found all my keep, cattle, implements, &c., seized by the landlord for rent. At the sale I gave the auctioneer a list of the things belonging to me, and also a written protest not to sell them, but they did sell the roots, hay, straw, cart, and other implements belonging to me and kept the money. By the above proceedings there was a loss to me of some £70 to £80. Some of your readers will say I ought not have given them the chance of selling my things. True, but I was misled by the assurances of the auctioneer, the tenant, his family, and the agent. My loss, although a heavy one, I hope to redeem in time, but those that have sold my goods have a sin to answer for, which, if not effaced in this world, they will certainly have to pay the penalty of in the next. Perhaps some of our learned teachers will enlighten us a little more upon the latter part of the subject.—W. G. WALTERS.

**NOT TO BE TAKEN IN.**—For my own part, ever since I have not only believed in ghosts but quaked at the thoughts of them. Here is the story:—A young Frenchman who had lost his betrothed on the eve of marriage, believed he saw her spirit every night in her bridal dress. His friends to shew him the folly of his belief, dressed a twin-sister of the deceased in a dress precisely similar and placed her at the head of the widowed bridegroom's bed, exactly at the hour the spirit came. He looked up and crying out, '*Ah! ciel! en voila deux!*' fell back dead on his pillow.—*Mayfair*.

**THE SECOND ANNOYANCE.**—A man had just buried his wife and was in great grief. As he returned from the funeral with a friend, the latter tried to console him by various platitudes, but in vain. At last he suggested that a good dinner might be acceptable, and prevailed upon the widower to enter a restaurant. Oysters were ordered, and the disconsolate widower unfortunately got hold of a stale one. "Horrid!" said he, with a sickly smile, "it never rains but it pours. This is the second annoyance this week."—*Examiner*.

## THE FARMERS' ALLIANCE.

"*Help thyself, and God will help thee.*"

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—If agriculturists are wise and true to themselves, they will rouse from their lethargy and give hearty support to the Farmers' Alliance, which has been started for their ben fit, remembering that union is strength.

They must do more than merely approve. They must contribute liberally to defray the necessary heavy expenses, as a national organisation of the kind can never attain success without sufficient funds to work it. Our country friends should bear in mind that God helps those who help themselves, but that there is no hope for such as do not. If they fail to embrace the opportunity of combination now offered and refuse to fall into the ranks, they deserve to forfeit all claim to sympathy, even should their condition go from bad to worse. They must no longer "run with the hare and hunt with the hounds." Having been a farmer myself, and having from my youth upwards been occupied in the study and practice of husbandry and the management of landed property, I claim a right to speak frankly, and this is my apology should any be necessary.

I observe that one of the objects of the Alliance is "To secure the better representation of tenant-farmers in Parliament." Now, Sir, this is a matter of the most vital importance, agriculture having but one representative at present in the House of Commons—Mr. Clare Sewell Read—and he hardly did his duty when Mr. Blennerhassett introduced his motion for abolishing the Law of Distress. I fear the member for South Norfolk is trying to serve two masters, believing "all the world's a stage." Farmers have vast political power; but they seem afraid to use it. Moreover, they do not appear to appreciate political organisation and combination sufficiently. Further, they have not a proper estimate of their own importance, since landowners could not possibly do without them. Hitherto the great majority of them have been driven like flocks of sheep to the polling booths. Should the Alliance become a grand success, which it certainly ought, we shall by-and-by see farmers go to the poll perfectly free and unconcerned to vote for candidates of their own class and choosing.

I see no reason whatever why there should not be a large number of farmers in the House. Until this is the case there will be no relief for them, as landholding M.P.s. represent only their own side of questions. It would be well, however, that they did otherwise, and acted on the noble and enlightened principle which the great Lord Leicester followed out so advantageously, namely, "That liberal conduct towards the tenant will ever be found to be the most beneficial to the landlord." This is unquestionably so.

I should like to see more independence among farmers. They generally show far too much servility to the landlords and agents, and only speak out boldly at clubs, market dinners, and rural fire sides. They seem constantly apprehensive of the wrath of the squire. There are exceptions no doubt, but they are few. It is not honourable—it is unjust and inexcusable—for landlords to coerce tenants to vote contrary to their feelings and interests.

I have read your able essay on the "Relations of Landlord and Tenant" with great interest and profit. Every farmer, and every landlord too, should peruse it carefully, as it shows in a remarkable manner the grievances which farmers justly complain of, and clearly points out the many hindrances to agricultural prosperity.

I am, Sir, &c.,

D. G. F. MACDONALD, LL.D.

## THE PRESS ON THE FARMERS' ALLIANCE.

The following are a few extracts out of a very large number of leading articles which have appeared on the Farmers' Alliance:—

The *Daily News* says:—

It would not be possible for the English and the Irish tenants to have a plan of operations entirely in common. But we understand that the Tenant Farmers' Alliance is constituted on a principle of limited liability. The English tenant farmers go with the Irish only so far as their interests, or at least their demands, are the same. For any further demand of the Irish land reformers they are not to be held responsible. This is reasonable, and ought to be found practicable. . . . . Whatever the difficulties may prove hereafter, the fact remains that such a league has been formed. It would not be easy to point to any fact more significant of the change which is coming over "the agricultural mind" of this country. If the Tenant Farmers' Alliance can be made to work, it will doubtless be followed by new combinations which would have been thought impossible a very few years ago. The rural labourer has long been up in agitation. He asks for the franchise, and talks of equal rights. The tenant farmer now begins to form alliances intended to act upon Parliament, for which he does not seek the sanction of his landlord. The very experiment, even if it should not succeed, is in itself an important fact.

The *Standard* remarks:—

The Alliance is formed, we are told, for "the removal of hindrances to agricultural prosperity," and the "preliminary programme" consists of a number of proposals. First and foremost, we have that on which all the others may be said practically to depend, namely, "the better representation of tenant farmers in Parliament." When this is effected, it will be the object of the Alliance to obtain increased security for capital invested in agricultural improvements, to abolish the class privileges involved in the laws of hypothec and distress; to promote the reform of the Game Laws, to reverse all legal presumptions which operate unfairly against tenant farmers, and to secure to ratepayers their legitimate share in county government, and a fair apportionment of local burdens. The programme, of course, is worded in very general terms, and there are few of the above objects to which, in the abstract, any reasonable man could take exception. But the "bearing" of these observations lies in the "application" of them, as Mr. Bunsby would have said; and as we know pretty certainly how they would be applied by the uncompromising Reformers from whom they come, we are in no danger of being misled by their plausible and innocent exterior. At the same time, it may be readily allowed that several of the articles we have quoted need not of necessity be indicative of ulterior purposes, and that many tenant farmers may support them in perfect good faith, and with no desire beyond that of bettering their own position in the station of life in which they find themselves placed.

The *Echo* states:—

The newly-formed Tenant Farmers' Alliance is already receiving an amount of support which must be most encouraging to its promoters. Some few years back an attempt was made by a few advanced agriculturists to form a Tenant Farmers' League, but the time was not ripe, and the effort proved abortive. Since then the farmers have learned some bitter lessons in the school of adversity. To what conclusion many of them are coming letters in our columns have frequently borne witness. Now that the opportunity for combination is afforded, under leaders who are prepared to fight for definite principles, and not use their position to make themselves the election hacks of a Government, all those who have, here or elsewhere, expressed their dissatisfaction at the neglect of agricultural grievances ought promptly to fall into the ranks. The agricultural labourers have shown that it is possible to carry on an active agitation in the rural districts, and farmers, who more frequently congregate together in the market towns, should have still less difficulty in the matter. The names of Mr. James Howard, Mr. J. W. Barclay, M.P., and Mr. W. E. Bear are a sufficient guarantee that the new association is ready to do its work well, if the farmers are only wise enough to support it heartily.



*The Spectator says:—*

The farmers are showing a new disposition to help themselves, instead of waiting to see who will help them. A Farmers' Alliance is now in course of formation, the founders of which are able, at all events in their own estimation, to pronounce, without the aid of any Royal Commission, whether the causes which have led to the present depression can be remedied by legislation. Of the six objects forming the preliminary programme which is to be submitted to the members for approval, five can only be carried out with legislation, while the remaining one is intimately associated with legislation. The five reforms which it is proposed that the Association should endeavour to obtain are—security for the capital of tenants invested in the improvement of their holdings, the abolition of class privileges involved in the Law of Distress and Hypothec, the reform of the Game Laws, the alteration of all legal presumptions which operate unfairly against tenant-farmers, and the concession to ratepayers of their legitimate share in county government. This programme bears the names of Mr. James Howard, Mr. James Barclay, and Mr. Bear, as representing the Provisional Committee, and it is said that the promises of support which have been received from tenant-farmers throughout the country are very numerous. Certainly, if we may judge from the reports of the meetings of various local associations which have lately been held, this programme is not at all in advance of the demands which the tenant-farmers are prepared to put forward, and if the Association is active, it ought to have no difficulty in effecting its remaining object, on which, indeed, all the rest depend—the better representation of tenant-farmers in Parliament.

Under the heading of "The Farmers on the War Path," *Mayfair* observes:—

The formation of "The Farmers' Alliance," a combination of the farmers and agricultural reformers of England, Scotland, and Ireland, is a striking sign of the times, and one that will be ominous in the eyes of those who have so persistently opposed all efforts made for the improvement of the tenant-farmers' condition. At first sight, an alliance of British with Irish farmers may appear disadvantageous to the former, as there is a strong prejudice in England and Scotland against the "platform" of the Irish tenants. But when it is remembered that there are sixty members for Ireland who usually vote as one man on any important land question, while the English farmers are represented in Parliament by men who are the most determined obstructives to agricultural reform, the disadvantage seems to be quite the other way. It is also to be observed that, according to the agreement arrived at by the leaders of the Alliance, the objects to be worked for are only such as can be consented to by the farmers of the three countries, and the peculiar demands of the Irish tenants have been left out of the programme of the Association.

*The Nonconformist says:—*

The new association could not have been started at a time more suitable than the present. Farmers have ruin staring them in the face, and the nation has a permanent agricultural decline to fear. That some fundamental revolution of the conditions of farming is absolutely necessary, if the finest agriculture in the world is not to fall into decadence, daily becomes more generally admitted. Farmers, therefore, now have enough to rouse them to spirited action, and the public generally have reason, hitherto but partially recognised, for insisting on the reformation of our land system; and it will be strange indeed if the Farmers' Alliance does not meet with such a liberal measure of support as will enable its earnest and energetic leaders to make it a power in the country.

*The North British Agriculturist says:—*

The movement promises to be one of very great importance, and deserves the cordial support of all farmers.

## DEVON COUNTY AGRICULTURAL ASSOCIATION.

—The council of this association has made an arrangement with Mr. Bernard Dyer, F.C.S. (the Society's Consulting Chemist), under which he will, for the future, perform all analyses for members on the same reduced scale of fees as that now adopted by the Royal Agricultural Society.

## LONDON CORN TRADE ASSOCIATION.

The first annual meeting of this Association was held on May 13, at the Baltic Side Room, and was well attended. The chair was occupied by Mr. John Ross, and among those present were Mr. Majolier, Mr. Power, Mr. J. Kressman, Mr. S. Halli, Mr. McDonnell, Mr. W. Harris, Mr. S. Taylor, Mr. F. Lendeira, Mr. Nisbet, Mr. W. H. Pien, Mr. Hall, Mr. R. D. Reid, Mr. M. G. Mavrogardato, Mr. R. Reid, Mr. Valiere, Mr. Wallace, Mr. T. Ubbaine, Mr. R. H. James, &c.

The HON. SECRETARY (Mr. Kressman) then read the Report and Balance Sheet.

The CHAIRMAN said he had now the pleasure of moving, "That the Report and the Statement of Accounts now read be received and adopted." He thought they would all agree with him that, considering that that was the first year of the Society's existence, when a great many expenses had to be incurred in connection with its formation, the balance-sheet might fairly be regarded as satisfactory. It was true that the balance in hand was not very large, but that was not of much consequence. The expenses had been kept down through the kindness of several members of the Committee in lending part of their offices for meetings of the Association, and particularly through the kindness of one of their vice-presidents, Mr. Power, through whose liberality the Association was at present living rent-free in an office upstairs. This arrangement might continue for two or three months longer, but it could not be permanent. The deputation gave a succinct account of the working of the Association during the past year. As regarded standard samples, his experience as an arbitrator had given him a greater power than was possessed by many members of the Association, as to what was the average sample of particular kinds of grain at the time of shipment; and he thought that among the objects for which the Society was founded there was none more important than that of settling standards to which an arbitrator might refer. They had hitherto been only partially successful in that respect. It would be seen from the Report that contracts had been passed by the Executive Committee for the East Indian wheat contract, the American grain contract, and the Black Sea "fall Quail," and "Sea-damaged contracts." The East Indian wheat contract had been, as the Report said, universally accepted, and he hoped that all who were engaged in that branch of the trade would find that contract advantageous. The Committee had written to different grain Boards in America, requesting them to send standards of their condition, but with the exception of the San Francisco grain Board, which had sent standards in the most handsome manner there had been no response. Therefore they had not yet been able to make complete arrangements with respect to samples of all kinds of grain. The Committee would, however, continue to give their attention to the matter, and would do all they could to collect standard samples for future guidance. During the past year a great deal of labour had been bestowed by the Committee upon the formation of the contracts. The most important clauses were arranged and re-arranged, and the subject was discussed over and over again with a view of settling contracts which would be equitable on both sides. The Calcutta grain contract had long been in use, but the same thing could not be said of the American grain contract. The growing of the contract with respect to the Black Sea cargoes had given rise to a little difference of opinion. The clauses had been discussed in the fullest and most practical manner. The Committee issued the contract to the trade with confidence, and they hoped that any feeling of opposition that might exist would gradually vanish, and that that contract would gradually take its place with the others. Assuming, as he did, that the enthusiasm manifested last year had not lacked, he would ask the meeting to continue to support the Committee. They had not hitherto been able to get any contributions except such as were of a trifling character. They had received a little from their contracts, and a little from their standard samples; but, apart from these, they were entirely dependent upon the subscriptions of members, and, assuming, as reported, that if they all wished the Association to go on he must ask for increased support.

Mr. W. J. HARRIS, in seconding the motion, also made an appeal for more pecuniary support, and expressed his belief that if this were not wanting the Association could render great service to the trade.

The motion was then put and carried.



Mr. S. W. KEENE said four gentlemen now retired by rotation from the Executive Committee, and he had to move that three of them be re-elected, namely, Mr. John Ross, Mr. John Ayle, Mr. Thomas U-borne, and to propose a new name for the fourth vacancy, Mr. Charles Routh. He then went on to explain that Mr. Valieri and Mr. M. G. Mavrogardato, who formed part of the Committee had refused to stand because they did not approve of a portion of the Black Sea contract, and he expressed a hope that they would rejoin the Committee at no distant day.

Mr. MAJOLIER having seconded the motion it was put and carried.

Mr. VALIERI then explained at length why he had objected to the Black Sea contract, and why he had felt precluded from continuing to act on the Committee. Having consulted a number of merchants connected with the Black Sea he had found that they concurred in his objection to the wording of that contract. The matter was discussed at great length and there was an unanimous feeling that the "new clause which had been introduced into that contract, and which he believed had never been introduced in any contract before, must be struck out if they were to act with the Association. The words used were "shipped in good order and condition." He proposed to add "due allowance being made for the season's crops and time of shipment," but the Committee refused to accept that modification, and as he felt very strongly on the point he could not consent to yield.

A long discussion ensued in which Mr. Power, Mr. S. A. Ralli, Mr. Majolier, Mr. Harris, and other gentlemen took part, most of the speakers endeavouring to convince Mr. Valieri that his objection was unfounded, and two or three contending that with the words which he proposed to add the clause would be more against sellers than it was as it stood, it being also remarked that the clause was necessary to guard against a class of merchants who, being totally unlike Mr. Valieri in that respect, were apt to mislead importers in London. Ultimately Mr. Valieri and Mr. Mavrogardato, who also spoke, were pressed to rejoin the Committee on the understanding that the question would be fully reconsidered in conference with those who were most interested on both sides—sellers and buyers.

**A GALLOW'S BALL.**—A singular festivity took place in New Kent, Virginia, the other day. It was termed a "gallows ball," and its occasion was the execution of two negroes, Patrick Smith and Julius Christian, for murder. The hanging attracted hundreds from every part of the country, and the negroes, who came in large numbers clothed in holiday attire, made a "gala day" of it. In the evening they determined to have a ball in a large barn. The band consisted of four banjo players and one fiddler. At midnight the orchestra struck up "The Mississippi Lawyer," and the dancing began. It was carried on with great spirit until about two o'clock in the morning, when an old Voodoo negress suddenly appeared in the middle of the scene, holding in her hand a large bundle tied up in a red hankerchief. The music at once stopped, and after certain incantations the old woman informed the assemblage that she had the ropes with which the men were hanged, and that after she had touched any bit of it that piece would secure the possessor against the evil designs of any person who touched them or poisoned them. She then cut up the ropes in small bits, over which she sprinkled something from an old jug, and sold each bit for 50 cents. There was such a demand for these pieces of rope that a fight was the consequence, and those who could not get a piece "acted like fends," begging for a thread only. The old woman told them nothing else would effect the charm except small particles of the clothing in which the men were buried. A rush thereupon took place to the grave under the gallows for the purpose of disintering the bodies and bringing back the clothes. The large party who undertook this task soon, however, returned in horror to the ball-room, declaring that they had seen the two men who were hanged walking round their graves. It was subsequently ascertained that the visit of the dancers to the grave had frightened off two men, who had come to dig up the bodies for the doctors. Notwithstanding the drawbacks the ball was a great success, the old negress announcing that all who danced at the "Gallows ball" would be able to dance so long as they lived, no matter if they lived to be ninety-one.

## A HEDGE TO GROW UNDER TREES.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—The subject of Mr. E. Outler's letter has engaged my attention more or less for thirty years, and many trial plantings of trees and shrubs have been made here expressly to test their relative capability to endure without harm the shade of trees and walls towering above them. The collective result is that in selecting materials for covering the ground in places heavily shaded—whether to form hedges or ornamental plantations—the choice may range over a variety of subjects. The common thorn (*Crataegus oxyacantha*) does not thrive if heavily shaded, but we find a capital substitute for it in the mynabala or cherry plum (*Prunus cerasifera*), a vigorous early growing tree with leafage of a cheerful light green colour. This has been largely propagated by Messrs. Ewing, of Norwich, who can supply it in quantity at a cheap rate.

Amongst hundreds of subjects that have been tried under the heavy shade of elms, chestnuts, and other trees that have a habit of making the ground bare beneath them, we have found the best for the purpose to be common holly, common yew, and the beautiful though cheap holly-leaved burberry (*Berberis aquifolia*). These are all well adapted to plant under elms in a clay soil, and are, when well established, proof "against the inroads of youth."

There is perhaps more said than need be about the injurious effects of "the drip of trees." It is the want of drip very often that kills the underwood, for the ground covered by big trees is often as dry as dust all the summer, and the small stuff has to live on what it can catch when the leaves are down. In our trial cultures we have had the heaviest losses in seasons characterised by dry springs; whereas, when there has happened heavy rain just before the big trees came into leaf, our under shrubs have borne the after droughty summer bravely.

And there is another matter I would like to mention while the pen is in my hand. The soil shaded by big trees is often in a considerable degree exhausted and much occupied with decaying roots. Those become clothed with the mycelium of fungi, which spreads in the shape of white threads, and soon takes hold of the roots of subjects newly planted, and exercises a deadly influence. This underground growth of fungi kills more underwood than drip, or shade, or starvation, and of course, is especially prevalent in land that has been long occupied with trees. Therefore, in planting under trees the ground should be well prepared, dead roots and masses of mildew should be thrown out and burned, and a good dressing of muck should be dug in to give the newly-planted trees a promising start in life.

I am, Sir, &c.,

Stoke Newington,  
May, 15, 1879.

SHIRLEY HIBBERD.

**AN UNSUSPECTED PERIL.**—A gentleman who had spent some days in the region of the coal-oil wells, in Pennsylvania, says that in his opinion the Government ought to interfere at once, and put a stop to further pumping and boring for oil. He is quite certain the oil is being drawn through these wells from the bearings of the earth's axis, and that the earth will cease to turn when the lubrication ceases! —*Echo.*

**TENANT FARMERS IN THE MIDLANDS.**—A London correspondence says:—"The state of affairs in the midland counties is such as to excite great anxiety among the landlords. So many farms are unlet that the incomes of the owners of property have been in some instances largely reduced, the tithes and the rates swallowing a considerable portion of the rents actually received. Some alarmists anticipate a permanent reduction of 50 per cent. in the letting value of many farms in the midland counties." —*Evening Standard.*

## NEW ZEALAND AS A FIELD FOR FARMING EMIGRANTS.

[The following valuable information in relation to farming in New Zealand has been sent in reply to a series of questions addressed by us to our old contributor, "J. S." Mr. John Simpson, now of St. John's College, Auckland, New Zealand, was for many years manager of an estate in Ireland, and his articles on practical farming in our columns during that period were marked by great knowledge and good judgment. Our readers may place reliance upon anything that he tells them of the country in which he is at present residing.]

### I. WOULD I ADVISE ANY ONE TO COME OUT HERE?

—No; for two reasons. First, because I made up my mind before leaving the United Kingdom that I would never be the means of inducing any one to emigrate, whether relative or acquaintance, for fear of after-regrets. Second, as I intend returning myself, it would look rather out of place my advising others to do what I could not or would not do myself. Notwithstanding this, I will give the required information in the most unbiassed manner, and your friend may depend on its truthfulness as completely as if he was on the spot, and had personally collected the information, judging for himself accordingly.

II. DOES FARMING PAY WELL?—Evidently, by what I can hear from the working and gentlemen farmers about here, there is not much money to be accumulated by any branch of farming; but an industrious man with capital may acquire property, both in land and stock, which will enable him to live in comfort and independence, and be a valuable inheritance to his family years hence, when the population has quadrupled, which it will not take so very long to do. The great point in New Zealand is, that every man possessed of health, perseverance, and industrious habits can have a home of his own, where he needs call no man master, and where he can have all the comforts of life, untrammelled by restrictions as to the working of his land, game laws, or any of the burdens or grievances of the old country. This very facility of obtaining a comfortable living to some extent retards the development of the country, as great numbers of people, when they find themselves in moderate comfort and independence, make no further effort to improve their position.

III. MODES OF FARMING.—Small farmers possessing, say, from 50 to 150 acres, mostly keep a dairy, growing green oats and Indian corn, which can be had in succession all the year round, and does admirably instead of turnips or mangels, not only during the winter months but during dry weather in summer when the pastures are burned up, a time when such a supply is actually of more importance than in winter. The produce is mostly made into cheese, for which an average of 7d. per lb. is obtained. Near towns butter is made, for which during the spring and summer from 9d. to 1s. per lb. is obtained, and in autumn and winter from 1s. 4d. to 1s. 9d. per lb. Such men have a field or two of wheat and a few acres of potatoes, the land being laid down again with clovers and grasses, without manure of any kind during the course, and sometimes they take four, five, or six crops of wheat in succession from the same field. Over 200 acres, some of them have all sheep, keeping every acre in grass, and growing nothing that will involve labour, not even a field of meadow-hay. This is a bad system, and engenders lazy, idle habits; and the land being overworked with stock for the sake of a big clip of wool, soon becomes poisoned, and the young sheep are hard to bring through the rainy season, many dying, which are just left to rot where they fall, months after the deaths being quite able

to be counted by the little heaps of bones scattered over the fields, showing very powerfully how labour is avoided in all countries where it is scarce and dear. Sheep-farming has paid badly this year, wool being so low—from 10d. to 1s. for washed, 7d. to 8d. for wool in the grease, and 6d. per lb. for lambs' wool. Splendid lambs have been sold for 8s. each—in fact the very pick of the flock—running down to 2s. 6d. for middling and inferior. Larger farmers combine cattle and sheep farming, providing nothing for the winter but a field or two of hay to throw on the grass during the spring, or they may grow a field of oats and cut it green for hay, which makes splendid fodder. It is astonishing how little labour these men employ; on a thousand-acre farm there may be only two men, and these almost continually on horseback, dashing about like the wind. They are splendid horsemen, quite as good as Mexicans, and with their long stock-whips, which they crack like a pistol, they almost take a bit out of the hide of a refractory bullock. A neighbour of ours, Mr. William Taylor, owns 12,000 acres in fee; what you would call his home farm being here, and consisting of 1,000 acres, carrying 2,500 sheep and a lot of cattle and horses, and the remainder in the valley of the Waikato, about sixty miles from Auckland. All this property is managed by himself and sons, the latter being splendid horsemen, and fashionable gentlemen as well. Mr. Taylor, although a very wealthy man, and a director of the Bank of New Zealand (you can see his name in the *Times* any day), says this vast property makes very little money, but will become exceedingly valuable by the extension of the railway system. He feeds splendid bullocks—three-quarter bred Shorthorns and pure Herefords—and these animals, weighing 8 cwt. each, make only about £12 on the average. He sold great numbers of sheep this summer, after clipping, to the boiling-down establishment, at 2s. each, and many of them were very good animals; but for cast ewes, no matter how good, their unavoidable fate is to be melted down.

IV. GETTING A FARM.—There is no difficulty in getting a farm almost anywhere, but really good land is not often in the market, and must be waited for and watched, as 50 acres of real good volcanic land, is better than 500 of middling scoria, or indifferent clay. The farmer who I have already mentioned as having had on a pet field 55 bushels of wheat per acre, would not part with his farms, which is his own property, at £50 per statute acre, and he has 63 acres or thereabouts. Six pounds an acre is about the lowest price for which land worth having can be obtained, and it will not be all cleared at that, but there may be a house on it, some offices, and a few fenced fields about the house. Ten pounds an acre will buy fair feeding land, and by chance all might be cleared and fenced at that price, but not often, although the whole money down, to a needy man, sometimes secures a bargain. A farm of 463 acres was bought the other day by a Scotchman I know at £15 an acre, and is considered worth the money although no particular bargain, one-fourth in cash, and the remainder on mortgage at 7 per cent., which is easier than bank terms, but still is a considerable burden. I have clipped out the advertisement of this farm, which will show you how such things are described. I may mention that this very Scotchman incautiously went too far into the country last year, in his anxiety to settle, and was driven off by the Maories, after ploughing and laying down to grass and clover 80 acres. He got about 600 acres very cheap, and had paid an instalment, but the man who sold could not give a good title, and hence the interference of the Maories from whom it had been bought honestly enough; but the deeds were imperfectly signed, a common defect with the Aborigines, and as they almost always regret parting with

their land, if there is a flaw, they are sure to take advantage of it.

V. **BEST PART OF THE ISLAND.**—The Province of Auckland alone contains 17½ million acres, and, possessing a magnificent climate, is decidedly the favourite with those who can afford to choose a particular locality. The whole island is very well described by comparison thus:—North Auckland, say from Whangarei and the Bay of Islands to Cape Maria is like Spain, South Auckland comprising the Waikate, Piak, Tamanga, and Poverty Bay, France; South of the North Island, and North of the South Island, England; and Otago, and Westland very fairly represents climate of Scotland, as it has frost and snow enough to please any Aberdonian. In any part of either island farms can be had in abundance of all sizes, and if a man wants a larger place than he has money to pay for, he can always borrow on mortgage, by paying ½ or a fourth in cash. In stocking but little money is required, as will be seen by the prices quoted, but even in this, money or stock will be gladly advanced by salesman and commission agents, who have the banks at their back, and are only too glad to be asked, but for all that, happy is the man, who keeps out of debt, although at the same time, it is perfectly consistent with good management to borrow a reasonable sum. Land is got on lease occasionally; but the practice of hiring land is as yet the exception, and not the rule, some of the best farmers I know being men paying a large rent however, and their practice, in having wheat and potatoes in large quantity, and using bone dust, is an example to the districts where they live.

VI. **CLIMATE.**—In the north Island simply delicious, particularly north of Lake Taupo, but all exceedingly healthy for Europeans, and cattle can live out throughout the winter and do well.

VII. **SAFETY OF LIFE AND PROPERTY.**—Not more so in the world, and there being little or no real poverty, and a living easily made, there is little temptation to plunder, and the population is as yet too small and scattered to contain or hide disreputable characters, and the law is also well administered, by a splendid body of police and resident magistrate in each district. With regard to the natives, they are very quiet people about Auckland, working for the farmers, fishing, and selling fruit, fowls, fish and mushrooms about the town, in the quietest and most unobtrusive manner possible. I speak from experience in this as well as in everything I have already said, as we live near the native settlement of "Oraker" a splendid block of land adjoining the Pacific, which they could never be got to part with, and are hemmed in by the whites. These people live mostly on pork, potatoes, sharks (which they catch in great numbers), and a kind of eel-fish called "pi-pi," which they collect in immense quantity, wash the shells clean of sand, then cook until the shells open, take out the contents, and string them on thread of the native flax, hang them on the fences to dry, when they keep good for months. There is a pi-pi bank just under our house, where a party of men and women often come, and remain a week or ten days, working most industriously between the tides, and sleeping round the oven, which is a deep hole in the ground, heaped up with pebbles, which are made red hot by a fire at the bottom, covered with bags, and sand heaped over all, so that no heat is dissipated or lost. This is an admirable oven, and fish, pork, potatoes, and herbs, such as tender thistles and fern-roots, are cooked by it in the most delicious manner, the flavour of the different articles being thoroughly incorporated by the confined steam. The ground all round is well warmed by such a huge fire continually going for the preparation of the pi-pi, and the whole company of men, women, and children, when night comes, just roll

themselves up in a blanket, and in a circle, with their feet to the fire, sleep the sleep of the just, until the returning tide calls them again to their labours. The only inconvenience their presence creates with us is their borrowing habits, the women borrowing tea, sugar, bread, and articles of wearing apparel, and the men a boat mostly, these things being a great temptation to them. When it becomes tiresome, however, and they are refused a couple of times they cease coming, and altogether they conduct themselves in the most good-humoured manner. In the interior they are sterner, and possess more of the nature of the savage than those who are living surrounded by white men, and no stranger to the country should ever think of settling amongst them, or of buying land direct, as he is sure to be the loser, as I have already given you an instance. There is no necessity for doing so, as Government negotiates the purchase of native lands in immense blocks, taking plenty of time (even years) to get all the tribal signatures, and then selling in suitable sections to the settlers, giving a Government title, which can never be gainsaid or annulled; so that any man trying to purchase a farm from the natives direct is a fool for his pains, and pays dearly for his greed or silliness. They are anxious enough for the money, but when that's received do not like to part with the land, and after a few months bring forward a few families of the same tribe, who they assert had an equal claim, and either require more money, or instant resignation of all claim, and, being the strongest party up there, they are not slow to enforce their demand, driving off all stock on the instant as a preliminary to what is to follow, and 40 or 50 tattooed men, with no dress on save a shawl or half blanket strapped round their loins, coming across a man's fields with hostile intentions, are no bad inducement to cut and run. To sum up this query, the native element in New Zealand is no hindrance to the safety or prosperity of the white men, and need deter no man from coming, a fact of which one finds the truth almost the instant he steps on shore, as the first thing that catches his eye is groups of tattooed men and women sitting on the wharfs, steps of hotels and public buildings, or on the pavement, smoking, laughing, chatting in Maori, eating pumpkins and melons, or offering such things for sale, and he sees instinctively that the day of danger from these people is past, accepting the fact on the instant by his own judgment.

VIII. **KIND OF BUSINESS.**—Undoubtedly a man possessing a trade, such as builder, engineer, carpenter, draper, or grocer, and £2,000 can do well; but to enter on any trade in New Zealand, or embark in any unknown business means bankruptcy sure and certain. Rents are terribly high, a country hotel even, of any standing, commanding a rent of from £12 to £15 a week, and as hotel in Auckland the other day, the United Service, was let at £12 a week for 21 years, £3,700 in cash, and the tenant to build a large wing at his own expense, which he has now got nearly finished. If a farmer, a farm is the only opening which affords him security for his capital, and he must, wages being so high and worth a man's while saving, lend a hand at all operations himself, and make his family do the same, or he will scarcely succeed; and it really pays well to do so, and in a new country it is no lowering of caste to do it, and is much pleasanter than most people suppose, and when a man and his family, by doing their own work, can save the price of two or three men and women servants, perhaps amounting to £8 a week, the fatigue of labour is forgotten. At 5 per cent.—the interest given by the banks—a man's money is fructifying while he is looking about; and, above all things, he should be in no hurry settling till he knows the country and can, to a great extent, judge for himself.

**CONCLUSION.**—New Zealand is a country people soon get fond of on account of its splendid climate, the abundance and cheapness of the necessities of life, and the feeling of security, comfort, and independence which seems to float in the air, and becomes part and parcel of a man's spirit almost at once, at least as soon as the home-sickness wears off, and he can look about him. Few people care about returning to the old country for good after having established themselves comfortably here, and most of those who do so return again, finding life insupportable in the old country, friends probably being dispersed, and their habits and very modes of thinking changed. Most people, however, are very fond of taking a trip for a year or so to the land of their birth, finding pleasure, I daresay, as much as anything, in showing their children the old and familiar scenes, and introducing them to relatives and old friends, and young people themselves are mad to see the land they have heard so much of, and nearly every ship and mail carries away a number of passengers of this kind, many of them substantial and well-to-do now, and who a very few years ago left home very humble people indeed. The people about here wonder that I myself should ever think of going back to a country where poverty and want cannot be kept out of sight even of the Palace, where independence in a humble man is simple impertinence, and where a living has actually to be struggled for; to say nothing of the severity of the winter, a thing unknown up here, frost being seldom ever seen, snow never, unless on the tops of very high mountains. They say if I do go I am almost certain to return amongst them again, but they also say that if I remain two years or so longer, I will laugh at my folly in ever thinking of leaving such a beautiful country, where life, aided by the bounteous gift of nature, both by salubrious climate and fertile soil, is so thoroughly enjoyable.

### THE FARMER'S ALLIANCE.

We insert a full copy of a circular issued by the Alliance because it is possible that some of our readers have not yet seen it.

Temporary offices, 265, Strand, London, W.C.  
May, 1879.

Sir.—As the results of preliminary Conferences recently held in London, we have the honour to inform you that it has been resolved to form an Alliance of Farmers and Agricultural Reformers for the removal of hindrances to agricultural prosperity.

The following objects were agreed upon as forming the preliminary programme of the Association, to be submitted to a general conference of members for approval:—

1. To secure the better representation of tenant farmers in Parliament.
2. To stimulate the improved cultivation of the land by obtaining security for the capital of tenants invested in the improvement of their holdings.
3. To encourage greater freedom in the cultivation of the soil and the disposal of its produce.
4. To obtain the abolition of class privileges involved in the Laws of Distress and Hypothec.
5. To promote the reform of the Game Laws.
6. To obtain the alteration of all legal presumptions which operate unfairly against tenant farmers.
7. To secure to ratepayers their legitimate share in County Government.
8. To obtain a fair apportionment of legal burdens between landlord and tenant.

It was resolved that the Association should be called "The Farmers Alliance."

A provisional committee was appointed, Mr. James Howard, of Clapham-park, Bedfordshire, being chosen Chairman, Mr. J. W. Barclay, M.P., for Forfarshire, and Mr. R. P. Blennerhassett, M.P., vice-chairmen, and Mr. William E. Bear, of 265, Strand, W.C., Hon. Sec.

The minimum annual subscription will be five shillings, and the subscription for life membership five pounds.

The minimum subscription is fixed at a small amount in order to enable everyone who approves of the objects of the alliance to become a member; but as the expenses of carrying out those objects will be heavy, it is hoped that many who join the association will contribute in excess of the minimum subscription.

In order to meet the preliminary expenses incidental to the organisation of the Alliance a fund for the purpose has been commenced. All who are willing to contribute are solicited to fill up the form headed "Donation Fund" hereto annexed, and to forward the amount of contribution to the honorary secretary, who will return a receipt for the same.

If you sympathise with the objects of the Alliance you are earnestly invited to become a member by filling up the annexed form headed "Membership," and forwarding your subscription to the honorary secretary. Only members will be entitled to attend the general conference, and to take part in the confirmation or revision of the programme and preliminary arrangements.

Your services are farther solicited in inviting your friends and acquaintances to become members of the Alliance.

As the objects of the Alliance are such as will conduce to the advantage of the nation at large, it is hoped that many persons not directly connected with agriculture will become members, and otherwise render assistance to the Association.

The Alliance will not be responsible for the views or projects of individual members or sections of the members, but only for the objects stated in its programme.

Signed on behalf of the provisional committee:

JAMES HOWARD, Chairman.

JAMES W. BARCLAY, M.P.,

R. P. BLENNERHASSETT, M.P. } Vice-Chairmen.

WILLIAM E. BEAR, Hon. Sec.

Since the circular was printed Mr. James Odams has consented to act as treasurer.

### MEMBERSHIP.

I desire to become a Member of the Farmer's Alliance, and I

\*agree to pay annually a subscription of.....

\*agree to pay a life subscription of £5

(Signed) Name.....

Residence.....

Post Town.....

County.....

\* Please run your pen through one of these lines, and fill up the other.

### DONATION FUND.

I enclose herewith the sum of ..... towards the Donation Fund of the Farmer's Alliance.

(Signed) Name.....

Residence.....

Post Town.....

County.....

N.B.—Subscribers will oblige by stating whether they desire their names to appear in any list of members that may be issued, or to be withheld from publication.

Subscriptions and donations should be sent in the form of cheques, or in that of Post Office Orders payable at the Temple Bar Post Office, to William E. Bear.

**ENGLISH PATRONYMS.**—The word John supplies us with so large a variety of these that we must needs preface them with a brief account of the chief ways in which English patronymics are formed. About six principal methods may be reckoned. The first is that in which the name itself is used without any addition, as in the instance of John Walter. The second is that in which the simple name is used with the addition of the sign of the possessive case, as in the instance of John Walters. The second is that in which the simple name is used with the addition of the word *son*, as in the instance of John Waterson. These three methods deal with the original name itself; the three remaining methods deal with the diminutive. In the first, the diminutive is used without as in the instance of John Watt or Watkin. In the second, it is used with the sign of the possessive case, as in the instance of John Watts or Watkins. In the third, it is used with the word *son*, as in the case of John Watson or Watkinson. To one or other of these six classes every true English patronymic may be referred.—From "The Adventures of an English Christian Name," in the *Cornhill Magazine for March*.

## THE AGRICULTURE OF WALES.

BY GORDOVIC.

## No. III.

Just before quitting Cardiganshire I must note its claims upon public notice for its educational status. This has been the fallow ground for the preparation, the raising, and the training of a splendid "crop of clergymen" of the Church of England. Numbers of the sons of farmers have been able to enter the Church through the facilities for early training in excellent grammar and high-class schools. Aberystwith has now its college, which lays claim to the title of "University of Wales." Recently there have been added to its other advantages courses of lectures on agriculture by competent Professors. In the extreme South of Cardiganshire we find another great institution in Lampeter College. This is a Church of England College, though in Dr. Llewelyn's time professing something broader. Ystradmeuriy has a more ancient history, and a longer roll of usefulness than either of these modern affairs.

To the South of Cardiganshire lie the two most south western counties of Wales—Carmarthenshire and Pembrokeshire. What a history these two interesting counties have; in nothing more so than in their agriculture. In these two counties we come to the strongholds of the Castle Martins. Here we find a breed of Black Cattle that the county people are justly proud of, and of which you may look out for fine specimens at the forthcoming Royal and International London Show. The intelligent and enterprising men of Carmarthen and Pembrokeshire have been fully alive to their duties in regard to this native breed. They have founded and fully established a herd book, and are in a fair way of generally improving the breed in all directions. On the banks of the Towy from that beautiful and rich country running from Llandovery to Llandilo and down to the mouth of the Towy, the lands seem to be studied with fine picturesque herds of these cattle. There is a general admission that there is ample room for further advances in the improvement of the breed. Such being the case, under reserve, I will say to myself "let well alone." Carmarthenshire takes a very respectable position in the production of first-class hunters. She has also a few thoroughbreds, but I cannot bring to my mind's eye anything of note in that line.

Pembrokeshire has played her part in the history of Wales, and also in the more modern history of England. Within her beautiful borders is the "Little England beyond Wales," the land of the Flemings and their industries. She has her Government building yards, from whence two iron walls of the English navy were launched a few days ago. Here also is the home of Milford Haven, where all the war ships of the world could safely cast anchor together. The London and North Western Railway Company have running powers down to the Western Coast, and thus insure quick connections between these two counties and all England. Government and Commercial enterprises have been the means of elevating several local industries in these countries. The farming interest is so interwoven through all three, that the success of a part has conduced to the success of the whole.

A few years ago, in no part of the world was there a more "well-to-do" community than the farmers of South Wales in general, and these two counties in particular. The downfall of the colossal, iron, coal, and other trades in South Wales has been terrible, and has most decidedly conduced, in part with other causes, to the great downfall in the prices of horses, cattle, sheep and pigs, and indeed all products of the farm. When a hundred thousand working men's wages are lower by ten shillings in the pound, and five months depending on one pair of arms

for their fill, the result must tell somewhere. It has told, and does tell on the farmers' receipts.

These two South Western Counties have splendid flocks of sheep. They are noted, Pembrokeshire particularly so, for early lambs. Their ewes lamb as early as the Dorset. They have now, at least they had a few days ago, lambs four, five, or six months old. The shambles have dealt with hundreds of them lately. The farmers in ordinary years are blessed with an early growth of abundance of sweet grass. Pembrokeshire is a coast county. Its Western and Southern sides around its bays and havens are open to the soft breezes of the West and South. These are charged to their full with humidity. I am also much impressed with the idea, which I have never seen promulgated before, that those two counties in winter and spring especially, are under the fortunate influence of the great Gulf Stream of the Atlantic Ocean. Not only do the South-west breezes spread over their lands, but the very waters of the ocean itself must find their way to their coast. The founders of our glorious Principality were no fools. They knew perfectly well which way the wind blew, and also to a great extent which side their bread was buttered. Ancient history informs us that originally the country was divided into three great sheep walks. As we have now the names of the cattle and sheep kings of America so also we have conveyed down to us from the remotest times the names of the great aboriginals of Wales under the appellation of "The Three Chief Sheep-men of Wales." They were each the owners of flocks numbering upwards of 1,000,000, and each struck out for his own selected "walk." We find this in our old Triads, "Tri prifdeffaidiwr Cymru." In Wales we never do anything by halves. Sometimes we do in "Wholes," but our general and historical rule is by "Threes." One rule, however, is in vogue North and South, that is for the flockmaster never to give you the exact number of his flock, especially if you are a landlord, or in some cases even a more important personage, a land agent. This, however, I have got to say, that not only have the times commercial, and the times political, and the times atmospheric been separately bad; but they have united their forces against the poor farmer in several instances. It is currently reported that one farm in South Wales has, this winter and spring to stand a loss of upwards of 2,000 sheep in its flock. Any farm and farmer that can stand that are something and somebody.

These two counties have their agricultural shows. Their societies are conducted by clear-headed and energetic men. One entire town, seemingly, has been, and is now in the market, the town of Llandilo. There is a superabundance of free trade in land and houses in that part of Carmarthenshire. Houses, offices, shops, gardens, plots, chapels, and everything for sale except "churches." Oh yes! By the bye, I nearly forgot the best thing yet out in buying and selling. We are such a law-abiding and peaceable, and law-loving people in Wales that some half-a-dozen, at least, of our county prisons are on sale. Nothing to do for the governors and staff, so they have all been discharged, and the huge prisons are given out for sale. Who'll buy a flash lot and convert them into —ay there is the rub and the difficulty—into what?

During the last few days Pembrokeshire was all excitement with the great "Philips" case. About 20 miles of splendid farming lands in the Law Courts—of course the Civil Law Courts. These big law cases, when lands are concerned, have in many instances a dreadful influence on the fortunes of the tenants. Big, long law suits have ended in beggaring not only plaintiff and defendant, but also many tenants, and scattering them to the four winds, especially when the case ends in a change of landlords.

No wonder the church bells rang merrily on receipt of verdict for plaintiff.

If you visit Wales don't neglect these two South-western counties. You will find beauties, and health, and interesting farming in all varieties, and will be well repaid for any loss of time and trouble you may incur.

Almost every large town in the two counties can boast of important educational institutions. Llandovny has a largely endowed first class school which in time will hope to vie with Rugby and Eton. Carmarthen has also its dissenting college. It must always be borne in mind that we are in the land of Dissent, when we tread the soil of Wales. Other towns have also well conducted schools, and all these are conveniently situated for the education of the sons and daughters of the farmers. As a general rule they avail themselves of these opportunities.

Look to whatever quarter we will from an agricultural point of view the appearances are gloomy. Here, on this 7th of May morning is the water covered with ice in some places, and the whole country, with the exception of low warm valleys, covered with snow.

I am adding one other finishing paragraph, to say I have been out all day. I left my upland home and encountered another snowstorm. I walked by the seashore and encountered another snowstorm there. In fact it has been snowing in some places the greater part of the day. Farmers look downhearted. Their hay stacks are getting much smaller day by day, and as yet their grass not much bigger. There seems to be some great compact between the Heavens above, and the Earth beneath, and the Waters under the earth. They are all cold, and the poor farmer is left out in the cold.

### THE CYCLE OF THE SEASONS.

Mr. E. J. Lowe, of Highfield House Observatory, Nottingham, has addressed a letter to the *Times*, in which he says:—

"There can be no reasonable doubt that a cycle of the seasons exists, though its precise period has yet to be ascertained. A lengthy investigation has, however, satisfied me that the cycle is about 81 years. Thus every 11 years drought and heat are experienced, usually of three years duration,—that is to say, the drought recurring in three consecutive summers. Such a period of drought is now apparently at hand, and the summer of 1879 may be expected to be very similar to that of 1868. Although the calculated period may be assumed to be 11 years from the commencement of one drought to that of the next, certain disturbing influences operate from time to time, and occasionally accelerate or retard the return of these droughts by one or two years. One striking fact to be specially observed is that the periods of extreme heat and cold are grouped together. The records of remarkable droughts and frosts, which have been handed down to us by the chroniclers, show that great droughts have usually been preceded by severe frosts, and as frequently followed by frosts of greater or less severity,—that is to say, in the majority of instances, so far back as we may trace, all the extremes of temperature are in groups of somewhere about five years, followed by a like period in which the heat and cold are not excessive. In this series of years, midway between these periods of excessive heat and cold, when the weather is more or less free from frosts in winter, and from droughts and heat in summer, we have, for example, from 1869 to the present time scarcely any drought recorded in the fourth, fifth, and sixth years after the computed commencement of what may be termed the drought period. In many instances the severe winter has preceded the first year's drought by a period of less than six months, and this is therefore a further proof that the summer of 1879 will, in all probability be one of heat and drought. If we assume that the drought of 1868 came at its appointed time, then the droughts of 1857, 1791, 1714, 1636, 1626, 1558, 1516, 1406, 1285, and 1021 likewise came at the appointed time; and upon the same hypothesis we may conclude that the droughts of 1845, 1834, 1778, 1757, 1746, 1724, 1691, 1669, 1614, 1361, 1350, 1251, 1130, 1086, and 987 were accelerated one year; and

that the droughts of 1825, 1704, 1593, 1528, 1473, 1429, 1341, 1243, and 1191 were retarded by one year. And again the droughts of 1800, 1835, 1803, 1393, 1328, and 1151 were accelerated two years, while those of 1573, 1375, 1276, and 1177 were retarded a like period. Thus between the years 1230 and 1868 in 54 periods we have 46 droughts recorded as commencing within two years of the appointed time. But if we take the year 1868 (midway between the assumed years of recurring droughts) in 43 periods we have as many as 35 instances where the drought does not occur within from three to five years of this epoch, and of this number there were 18 instances, when there are no droughts nearer than five years to this starting point; while if we take 1868 as the assumed year, we have scarcely an instance of the drought commencing as much as five years from the appointed time. The following are instances of great frosts occurring immediately before a great drought:—1211, 1799, 1779, 1758, 1746, 1691, 1680, 1678, 1669, 1658, 1646, 1635, 1636, 1614, 1598-1572, 1537, 1515, 1260, 1241, 1231, 1176, 1151, 1146, 1121, 1096, 1086, 1036, 1030, 987, 774, and 757—i.e., there are 33 frosts in 58 periods occurring immediately before a drought. There are 27 instances of the drought continuing at least for three consecutive years, and of this number 16 occur in the last 27 epochs. A further proof that the cycle of the seasons is 11 years is shown if the periods are arranged so that 100 years intervene (i.e., by taking every ninth period). We then find that for several years the droughts repeat themselves every 100 years, thus:—1800, 1700, 1600; 1815, 1715, 1615; 1826, 1726, 1626; 1836, 1736, 1636; 1857, 1757, 1687; 1779, 1679, 1479; 1791, 1691, 1591, 1492, 1393, 1293, 1103. These droughts and frosts extend over a considerable area; and there is evidence that the *maxima* intensity is not necessarily repeated over the same tract of land."

### IS HIGHER FARMING A REMEDY FOR LOWER PRICES?

#### NO. II.

We give here the second part of Mr. Lawes's lecture at Berwick. The first portion will be found on page 893.

#### THE MANURE PRODUCED BY THE ANIMALS OF THE FARM.

I now come to the second branch of my subject, namely, the cost of the manure produced upon the farm. It may perhaps be assumed that, in the case of the horses working upon the farm, their labour may be taken as an equivalent for the cost of their food, the expenses of attendance, &c., and that the manure they produce is, so far, obtained free of cost. In the case of the feeding of animals for the production of meat, store stock may be cheap and fat stock dear, or *vice versa*, cattle food may be cheap and meat dear, and so on. In considering therefore whether, as a rule, the value of the meat produced is more or less than the cost of the food of the animal, together with the other expenses, it will be necessary to exclude from the calculation all such exceptional cases as above referred to; to take as the basis of any conclusions (so far as we can estimate it) only the average amount of food required to produce a given weight of increase; and to compare the cost of such food, and other expenses, with the value of the increase. Looking at the subject from this point of view, I think it will be found that the outlay is generally much in excess of the receipts; and that there is, therefore, a balance left over which must be reckoned as the cost of the manure.

Confining my attention to cattle, I shall first endeavour to show, by reference to published records relating to animals of certainly above average quality, and undoubtedly liberally fed, what is the probable rate of increase that may be expected in such cases; and secondly, what is the average amount of food required to produce a given amount of increase.

In Table VI. are given the ages, weights, and increase—first, of a number of prize cattle exhibited at Salford, in December, 1878, as recorded in the *Agricultural Gazette* of January 13, 1879; secondly, of a number of prize cattle exhibited at the Chicago Society's Show (United States), and reported in the *Country Gentleman's Newspaper*; thirdly, of some French cattle of the Nivernais-Charolais breed, the particulars of which will be found in the *Journal of the Royal Agricultural Society of England*, vol. xv., p. 213; lastly, at the foot of the Table is given, for comparison, the estimate of

the average rate of increase during the fattening period, as adopted at Rothamsted many years ago.

TABLE VI.  
AGES, WEIGHTS, AND INCREASE OF CATTLE.

Description.			Average Age.	Average Final Weight per head.	Increase per day.	Increase per 1,000 lb. Live-weight per week.
	No. of Class.	No. in Class.				
<i>Prize Cattle at Smithfield, 1878.</i>			Weeks.	lbs.	lbs.	lbs.
Devons.....	1	9	116	1301	1.60	14.8
	2	7	167	1568	1.34	10.5
	3	5	215	1785	1.19	8.3
	4	3	165	1456	1.26	10.6
Average			165½	1527½	1.35	11.1
Herefords.....	6	10	118½	1615	1.95	14.9
	7	5	165½	1964	1.70	10.9
	8	2	221½	2085	1.34	8.2
	9	2	178½	1781	1.39	10.0
Average			171	1848½	1.60	11.0
Shorthorns .....	11	6	120	1698	2.02	14.8
	12	10	160	1980	1.75	11.3
	13	5	163	2352	2.06	11.3
	14	10	172	1876	1.56	10.5
Average			153½	1971½	1.85	12.0
Sussex .....	16	7	116	1588	1.96	15.2
	17	8	151	1818	1.73	11.9
	18	4	203	2390	1.68	9.1
	19	7	160	1736	1.55	11.1
Average			157½	1833	1.73	11.8
General average			162	1808	1.63	11.5
<i>Prize Cattle, Chicago Society, United States.</i>						
1. Steers, 4 years and over—						
	1st Prize		268.6	2085	1.10	7.1
	2nd Prize		271.7	2440	1.28	7.0
2. " " 3 yrs. and under—						
	1st Prize		182.9	2115	1.65	10.4
	2nd Prize		174.3	2060	1.68	10.9
3. " " 2 yrs. and under 3—						
	1st Prize		138.4	1705	1.76	13.5
	2nd Prize		139.7	1600	1.63	13.4
4. " " 1 yr. and under 2—						
	1st Prize		92.9	1480	2.28	20.0
	2nd Prize		95.7	1275	1.90	19.1
Average			170.5	1845	1.66	12.7
<i>Nivernais-Charolais Cattle—French.</i>						
No. 1. ....			134.8	1473	1.57	13.6
No. 2. ....			156.4	1987	1.81	11.9
No. 3. ....			160.8	1893	1.68	11.6
No. 4. ....			174.0	2079	1.71	10.8
Average			156.5	1859	1.69	12.0
General average of all.....			163.7	1826	1.65	11.9
Rothamsted adopted average						10-11

Before discussing the figures given in the Table, it will be well to give some explanation of how they are obtained. The ages, and the final weight per head, are the actual data recorded. The increase per day is obtained by dividing the final weight by the number of days of age. This is the mode of

representation adopted in the United States; and the figures given in this column for the Chicago cattle are those actually recorded; whilst those for the Smithfield and French cattle are calculated as above described. It is obvious that such a mode of reckoning, however valuable it may be in comparing the rates of increase of animals of the same description, oxen, for example, but of different breeds, or of different ages, it is quite inapplicable in comparing the rates of increase of animals of different descriptions, and of different sizes; of oxen, sheep, and pigs, with one another, for example. Many years ago, when considering this subject, we felt the necessity of adopting some mode of representation which enabled us to compare the amounts of food consumed, and the amounts of increase produced, not only among animals of the same, but of different descriptions, and of all sizes. Accordingly, the standards we adopted were:—

The amount of food consumed per 100 lb. live-weight per week.

The amount of food required to produce 100 lb. increase in live-weight.

The increase per 100 lb. live-weight per week.

But as, on the present occasion, I am dealing with cattle only, I give, as you will see in the last column of the Table, the increase per 1,000 lb. live-weight per week. At the foot of this last column is given the average increase per 1,000 lb. live-weight per week of all the cases recorded in the Table, including the different breeds of the different countries; "babies" of two years old and under, and mature animals of four years old and over. This general average of such very varied individual cases shows 11.9, or nearly 12 lb. increase per 1,000 lb. live-weight per week, whilst the Rothamsted estimate, adopted many years ago, is 10 to 11 lb. per 1,000 lb. live-weight per week, as the average rate of increase of oxen during the last few months of feeding on good fattening food. To go a little more into detail, compared with this Rothamsted estimate of 10 to 11 lb., the average of the different lots of the Smithfield prize cattle gives 11.5 lb., that of all the Chicago cattle 12.7 lb., and that of the four French cattle 12 lb.

In making these comparisons it must be borne in mind, however, that whilst in the case of the Smithfield, Chicago, and French cattle, the increase is, for want of other data, calculated upon the average light-weight from birth to final weight, in that of the Rothamsted estimates it is taken upon the average weight of the final fattening period only; and as the rate of gross increase upon a given live-weight within a given time, is considerably higher in the latter than in the earlier periods of the life of the fattening animal, the figures are, so far, not strictly comparable.

On the other hand, a mature animal contains a larger proportion of saleable carcase, and a less proportion of internal organs, and offal generally, than a young or store one. The mature animal also contains a much higher percentage of dry or solid substance, and, accordingly, a lower percentage of water. These differences are clearly illustrated in the following Table, which gives the proportion of carcase in 100 fasted live-weight, and also the percentages of dry or solid substance, and of water, in 10 animals of different descriptions, and in different conditions as to age and fatness, which were analysed at Rothamsted, now nearly thirty years ago.

TABLE VII.  
COMPOSITION OF VARIOUS ANIMALS.

Description and Condition of Animal.	In Fasted Live-weight.		
	Carcase.	Total dry Substance.	Water.
	Per cent.	Per cent.	Per cent.
Fat Calf .....	62.0	33.9	63.0
Half-fat Ox.....	64.7	40.3	51.5
Fat Ox.....	66.2	41.6	45.5
Fat Lamb .....	60.2	43.7	47.7
Store Sheep.....	53.3	36.7	57.3
Half-fat old Sheep .....	53.6	40.6	50.3
Fat Sheep .....	57.5	50.7	43.3
Very Fat Sheep .....	63.1	59.6	35.2
Store Pig.....	66.4	39.7	55.0
Fat Pig .....	76.0	54.7	41.4

Thus you will see that even a fat calf contained a much higher percentage of water, and lower percentage of solid matter, than a half-fat ox; whilst the fat ox contained much more solid matter than the half-fat one. Then, again, among the sheep there is a gradually increasing percentage of dry or solid matter, and decreasing percentage of water, from the store to the half-fat, from the half-fat to the fat, and from the fat to the very fat condition. A similar result is observed as between the store and the fat pig. From these facts you will see that, although the gross increase is less in proportion to the live-weight as the animal matures, a larger proportion of such gross increase consists of carcase, and of real solid matter, and a less proportion of offal and of water. In fact the fattening process may be said to consist in great measure in the displacement of water by fat.

Accepting the figures given in Table VI. as giving a fair idea of the rate of increase of well-bred and well-fed animals, the question arises—at what cost of food has that increase been obtained? We have no records on this point in regard to any of the animals referred to in the Table. We must, therefore, rely upon other data in arriving at a decision on this part of the subject. Our own estimate, founded on all the data at our command, partly relating to the recorded experience of others, and partly to the results of direct experiments of our own, led us many years ago to conclude as follows:—

“Fattening oxen liberally fed upon good food, composed of a moderate proportion of cake or corn, some hay or straw chaff, with roots or other succulent food, and well managed, will, on the average, consume 12 to 13 lb. of the dry substance of such mixed food, per 100 lb. live-weight per week; and they should give 1 lb. of increase to 12 or 13 lb. dry substance so consumed.”

In other words, these will be consumed 120 to 130 lb. of the dry substance of such mixed food per 1,000 lb. live-weight per week, producing on the average 10 lb. of increase; and 1,200 to 1,300 lb. will, therefore, be required to yield 100 lb. increase in live-weight. If the mixed food contain so straw-chaff, and only a moderate amount of hay-chaff, the average amount of dry substance consumed will be the less, and the average proportion of increase the more, or *vice versa*. Accordingly, we have assumed that on a liberal mixture of oilcake, clover-chaff, and swedes, as little as 1,100 lb. dry substance may be required to produce 100 lb. increase, and as much as 11 lb. increase may be produced per 1,000 lb. live-weight per week.

The articles which you are accustomed to speak of as dry foods, still contain some water. Thus, cakes contain from one-eighth to one-ninth, and corn, hay, and straw, about one-sixth of their weight of water; whilst swedes do not contain more than 10 to 12, or mangolds more than 12 to 13 per cent. of really dry or solid matter; but the monster roots of which we hear so much, sometimes contain only about two-thirds as much dry matter as moderately sized and well-matured roots should do. Of really dry substance, such as my estimates given above require, 1,200 to 1,300 lb., say 1,250 lb., would, in round numbers, be supplied in the following amounts of each of the several descriptions of food enumerated, supposing them to be of fair average composition in that respect.

TABLE VIII.  
AMOUNT OF EACH FOOD CONTAINING 1250 LBS.  
DRY MATTER.

Cakes, ...	...	12½ cwt.
Corn or Hay, ...	...	13 "
Swedish Turnips ...	...	5 tons.
Mangolds, ...	...	4½ "

The question arises—What would be the cost of 1,250 lb. of dry substance, made up of a suitable mixture of these various foods, to yield 100 lb. increase in live weight, and whether this would be less or more than the 100 lb. increase would sell for?

Well-bred and moderately fattened oxen should yield 58 to 60 per cent. carcase in fasted live-weight; very fat oxen may yield from 65 to 70 per cent. But of the increase obtained during what may be called the fattening period of moderately fattened oxen, it may be reckoned that about 70 per cent. will be carcase. Supposing you get 8d. per lb. for this, the selling value of your 100 lb. increase in live-weight

will be 46s. 8d. Now, I think if you try to make up 1,250 lb. of dry substance by a suitable fattening mixture of the foregoing foods, you will find that it will cost you considerably more than 46s. 8d. Even if roots alone were used, which would not be considered good fattening food, the cost would be more if they were reckoned at their selling price, though less if taken at what is called their “consuming value.” But with no good fattening mixture of cake or corn, hay-chaff, and roots, could 1,250 lb. of dry matter be obtained for anything approaching the sum I have estimated as the value of the increase it will produce.

It is further to be borne in mind that, weight for weight, store stock is generally dearer than fat stock. You have also to add to the cost of the food various other charges, such as rent of buildings, appliances, attendance, and risk. Taking all these things into account, I think it is evident that there must always be a very considerable proportion of the cost of feeding, although varying greatly according to circumstances, which must be taken to represent the cost of the manure.

In 1876, the Council of the Royal Agricultural Society of England appointed a committee to consider the question of the valuation of unexhausted manure, with reference to the provisions of the Agricultural Holdings Act; and a Table of the estimated value of the manure obtained by the consumption of different articles of food, which I had first published about 18 years previously, and after reconsideration republished more recently, was much discussed and criticised. The general impression arrived at was, I think, that my estimates of manure-value were too high. Accordingly, Dr. Gilbert and I selected linseed cake as the best known article of purchased cattle-food, and, after deducting my estimate of the manure-value from the cost of the cake, we endeavoured to calculate whether the remainder of the cost could be recovered in the increased value of the animal. The best linseed cake was then quoted at £12 10s. per ton and deducting the manure-value as given in my Table, namely, £4 12s. 6d., there was left £7 17s. 6d. to be charged against the animal, and calculation led us to the conclusion that it was extremely doubtful whether this amount could be recovered in its increased value. In fact, linseed cake appeared to us to command what may be called a fancy price. At any rate, it was quite certain that it could not be profitably used, if not fully as much, or even more, than the amount of my estimate were charged against the manure.

Although in the foregoing illustrations I have confined my attention to oxen, if the same mode of calculation were applied to sheep and to pigs, it would be found, in their case also, that the cost of their food is more than the value of the increase it produces. Notwithstanding that the contrary view is so frequently assumed, the use of the term “consuming value,” as distinguished from selling price, seems to recognise that food stuffs have a value other than as food alone. If restrictions upon the sale of roots, hay, and straw, were abolished, these articles would soon cease to have what may be called a fancy price; and the difference between the so-called “consuming value,” and the real selling price, would more nearly represent the value of the manure.

In the former part of my address, I have shown that, beyond a certain limit, the increase of crop does not keep pace with the increase in the amount of manure applied to the land, and this is especially the case in advancing from high to still higher farming. I have now advanced evidence which must, I think, convince you that the manures of the farm cost money. It seems to me that an obvious deduction from these two facts is that, to apply manure in such quantity as to obtain a diminished produce for a given amount of it can only be profitable when the price of the produce rises, and not when it falls. So far, however, as increased production is to be attained by the exercise of freedom, intelligence, and economy, in management, so as to get the maximum amount and value of produce from the manure that is applied to the land, and the maximum amount and value of meat and manure for the outlay in store-stock and in food, increased production is a necessity of the times, and would prove the best remedy for lower prices of farm produce.

I regret to find that the opinions I hold, and have ventured to express to you, are not in accordance with those of many who write upon the condition of the farming interest at the present time. Nor do they quite accord with the advice given.



to you in this room, by Lord Polwarth, only in February last. In a letter which his Lordship subsequently published, in further explanation of his views, he said that, for increased production, "greater liberty in cultivation is desirable;" and again, that "there must be increased capital, scope for enterprise, and security of tenure." In this I entirely agree, excepting that I would venture to say that such changes are not only "desirable" but essential.

To attempt to meet falling prices by increased production upon the old lines, that is, by simply increasing the amount of manure brought upon the land, and at the same time maintaining the old rules and restrictions as to cropping and sales, would, in my opinion, be entirely futile. If all restrictions were abolished, excepting such as would secure that the tenant should give up his farm in as good a state as he entered upon it, the position of things would be entirely changed, and some of my remarks would then require modification accordingly.

Recent discussions clearly show that landowners fully recognise the gravity of the present state of affairs, and that they are desirous of assisting the tenant by the relaxation of existing covenants, and in other ways. In addressing tenant-farmers, I would venture to ask—whether, on their side this is not a favourable opportunity for taking stock of the modes in which they conduct their business, with the view of bringing their operations more into accord with the rules which regulate other commercial undertakings?

In illustration of my meaning, I will call attention to the way in which the business connected with the stock of the farm is generally conducted. Farmers are justly proud of their fine animals, and consider them to be the back-bone of British agriculture. But is it not a fact that every transaction in this immense branch of industry is carried on almost exclusively by guess-work? Neither in purchasing store-stock, nor in selling fat-stock, are the scales brought into requisition. Again, in the feeding operations, neither the amount of increase produced, the amount and the cost of the food required to produce it, nor the comparative value of different foods in regard to their feeding and manure productiveness, are taken into calculation.

Of late store stock have been very dear, and I have little doubt that, if tested by the scales, it would be found that oxen and sheep have been bought at prices which would represent 6d. per lb. Now, 6d. per lb. is £56 per ton. To purchase ten tons of store-stock would not be a very large purchase to make. Now, I should like to ask the best judges of stock in this room to pick out from a herd of oxen, or a flock of sheep, as many as they thought would make up ten tons in weight; or to see, if two or three went to work independently, how nearly their estimates would agree! If your coal merchant, or your manure dealer, proposed to sell you these commodities by the heap, you would not hear of such a thing, and you would insist upon purchasing by weight. But, weight for weight, these articles bear no comparison in value with that of animals. If, then, with articles of comparatively little value you will not buy by the lump, regardless of exact weight, why should you do so with anything so costly as your store-stock? I admit that I am myself compelled to adopt the custom of the trade; but I nevertheless thoroughly resent it, and feel that I never know whether my purchase has been a good or bad one, until I have brought the animals to the scales, and calculated the price per pound of live-weight. The eye is the proper judge of quality, and the price per pound, or per cwt., should be settled accordingly; and, this done, the total value should be settled by the scales.

The same plan of guessing is adopted in the sale of the fat stock. Here the butcher is sure to have the best of the bargain; for every day his guesses are checked by reference to the scales, whilst the farmer's are not, and what chance has the feeder, or his salesman, against such an advantage as this?

If the farmers of the country at large were to agree to declare that they would only buy and sell stock by weight, they would doubtless have ample power to enforce their decision.

The same indifference to weights is manifested throughout, from the birth of the animal until it reaches the butcher. There is the clearest evidence of this in the discussions of the subject amongst farmers themselves, whether at home, at the market table, or at the clubs. If the custom of buying and selling stock by weight were once established, and it is so

already to a great extent in America, the advantages to the farmer would be very great in various ways. He would not only be able to test the money result of his actual purchases and sales, but he would gain much experience which would sharpen his judgment in the matter in the future. A greater advantage still would be that he would be led to test his practice at every intermediate stage between the breeding or the buying and the selling. He would ascertain what were the best mixtures of food to use, according to the seasons and to the markets. He would determine—whether his animals were giving a proper rate of increase; how much of different foods they required to produce it; and he would carefully consider also the manure-value of different foods. He would, in short, take the only means of insuring economy in his meat and manure manufacture.

I was asked by your secretary to address you this evening on the most economical method of producing meat. But I felt that, as the only way in which I could properly treat the subject would be by reference to weights, both of the food and of the animals, it would be, to many, neither interesting nor instructive; it would, in fact, be like speaking in an unknown tongue.

I will endeavour to illustrate my meaning by reference to a question which is much discussed at the present time—namely, the relative economy of producing young or old beef.

If you look at Table VI., to which I have already called attention, you will find that in the top line of each of the four divisions, relating, respectively, to the four English breeds, you have an example of early maturity; and the increase per day, and the calculated increase per 1,000 lb. live weight per week, show, by comparison with the older animal, a more favourable rate of increase. To produce the same weight in two years as would otherwise be only attained in three years or more, is, of course, in many points of view, a great gain. As animals consume and expend a given amount of food daily, in proportion to their weight, merely in the maintenance of their existence, it is obvious that there is, so far, a considerable saving of food if the same weight is attained in one-half or two-thirds the time. Other expenses will also be more or less reduced, the shorter the time required to produce a given weight. It is true that, so long as an animal only feeds in a pasture in the summer, and only receives straw and roots in the winter, it lives at comparatively little cost, even if it make but slow progress, until the final period of fattening begins. Again, as the animal matures, it consumes less food for a given live-weight within a given time, a great weight of food gives rather less gross increase, but a given weight of gross increase represents more carcass, more solid matter, and less water. On the other hand, to obtain the more rapid increase, much more costly food must be given throughout the life of the animal.

It is obvious that the two systems cannot be fairly compared, without taking into the calculation accurate data—as to the cost of attendance, the quality, quantity, and cost of the food consumed, the rate and value of the increase, and the value of the manure in the two cases. Yet, in none of the discussions of the subject of which I have seen the records, has there been any attempt to bring figures relating to these various points to bear upon the question.

A few weeks ago there was an article in the *North British Agriculturist* headed "Young v. old beef." The Editor justly speaks of the excellence of the article, which he says was written by a well-known Shorthorn breeder, who has often than once tasted the sweets of first honours at the Smithfield and other National Fat Shows. The writer gives the increase of weight of five cattle, of different ages, from March 1 to November 1. He says that the animals were fed on the best he could procure for them, were all healthy during the experiment, and all figured as first prize takers at Christmas Show. But, he adds, the food was not weighed; and further on he says, "this instance I have selected from many in my note books of live weights of animals, and increase at different times; and the proportionate increase of weight of different aged animals is fairly stated in the above examples."

I gather from these statements that it is assumed by the writer that the rates of increase quoted are what may be expected in the case of first-class Shorthorns, of the ages given, and fed upon the best food that can be procured for them. They were as follows; and I have added a column showing

the rate of increase per head per week, obtained by dividing the total increase by 86, the number of weeks from March 1 to November 1:—

	Increase in Live-weight.	
	From March 1 to November 1.	Per head per week.
	Cwts. qrs. lb.	Lb.
1 Four-year-old .....	1 3 0	4½
1 Three-year-old .....	2 0 0	6½
8 Two-year-olds (average per head)	4 0 24	13½

The actual weights of the animals are not given. But it may be assumed that the four-year-old ox would weigh nearer 2,000 lb. than 1,000 lb.; so that the rate of increase would probably not be more than 2½ to 3 lb. per 1,000 lb. live-weight per week, instead of 10 to 11 lb. according to our estimate. Nor would either of the younger animals show a sufficient rate of increase; though the evidence is certainly very much in favour of the younger animals. The 4½ lb. increase per head per week of the four-year old would be worth about two shillings; and I leave you to judge what relation that sum would bear to the cost of feeding a four-year-old Shorthorn on the best of everything! These figures afford some idea of the cost of obtaining a prize, but they are of no value as examples of profitable feeding.

It must be understood that in making these remarks I do not wish to find any fault with the writer, who is obviously a man of much intelligence and experience. But I wish to enter a protest against the system of disregarding attention to the weights of animals, to their rates of increase, and to the quality, quantity, and cost, of the food they consume to produce it, which alone could render it possible that such results could be quoted as examples of successful feeding.

It is a somewhat humiliating admission to make, though so far it has proved to be too true, that the virgin soils and plains of the United States and Canada can produce and send to this country, corn and meat, cheaper than they can be produced on our own soils at home, with all our boasted skill and science. The opinion expressed by some, that we shall again become exporters of corn, is altogether chimerical. But we have at any rate the cost of transit in favour of home production. This, though a less considerable protection in the case to grain, must always be a material item in the case of live animals, and of meat; and the rearing and feeding of stock must always form an important branch of our farming.

It is such a generally accepted opinion that the agriculture of Great Britain is superior to that of any other country, that you will perhaps be disposed to resent the allegation that there is very much in your practice which require improvement. During the last thirty or forty years, our knowledge of the productive effects of different manures, of the food requirements of different animals, of the increase they should yield, and of the value of the manure they produce, has made great progress. But comparatively few British farmers pay any attention to such subjects, or care to avail themselves of the information at their disposal. It is true that much of the existing data is not yet available in a form which would be easily intelligible to farmers generally, but this is because there is little demand for such knowledge; and a comparison of the current agricultural literature of this country with that of America, and of some parts of the European continent, would show that the demand is greater in those countries. So long, indeed, as the old routine yielded fair profits, what need was there of any change? But the present crisis, though I fear it may bring loss and suffering to many, will not be without some advantages, if it should lead to the conduct of agricultural operations on a basis more in accordance with both commercial and scientific principles.

**THE AGRICULTURAL DEPRESSION IN SCOTLAND.**—Owing to the low prices of grain and cattle, Lord Breadalbane has reduced the rents of a number of farms on his estates by 20 per cent. Edrarnachy, let at £160, has been relet at £130, and Firanthur, let at £250, has been relet at £200.

## THE ENGLISH CART HORSE SOCIETY

We have received the following letter for publication.

Marham Hall, Downham Market, May 19th.

Referring to Mr. James Howard's characteristic letter, which appeared in the *Live Stock Journal* of the 16th instant, I agree with him that the statement reported to have been made by me at the annual meeting of the above Society on the 6th instant, is "neither accurate nor complete." What I intended to, and believe in substance did say, is as follows:—That at the first meeting, which I attended, to form a Stud-book Society for cart-horses, Mr. James Howard suggested that the name of the Society should be The Shire Horse Stud Book Association. Mr. C. S. Read, I, and others objected to such title, and, after some conversation, Mr. James Howard moved, and Mr. C. S. Read seconded, that the name be The Old English Cart-Horse Stud Book Association, to which, as an amendment, I moved, and Mr. John Morton seconded, that it be The Cart-Horse Stud Book Association. On a division the numbers were equal (I believe 18 for, and 18 against), whereupon, at the suggestion, and by the advice of the President, the Earl of Ellesmere, a compromise was effected; Messrs. Howard and Read consented to withdraw the word "Old," and Mr. Morton and I agreed to the introduction of the word "English," thus the motion and the amendment became identical, viz., that the name be The English Cart-Horse Stud Book Association, and so put to the meeting was agreed to *nem. dis.*

Eventually the name of the Association, I think, with the assent of Mr. James Howard, was shortened to its present form, The English Cart-Horse Society. From the foregoing it appears that Mr. James Howard's and my recollection differ as to what took place at the meeting to which I have alluded, but such difference does not materially affect the question at issue.

With regard to such question, as no one, so far as I am aware, decries that "Shire" horses only should be eligible for the Stud Book, the title Shire horse would be a misnomer, and I affirm without fear of contradiction, (1) that the name of the Society was agreed to *nem. con.*; (2) that every member (both life and annual) has joined the Society under that name; (3) that it has been registered by such name, and (4) that H.R.H. the Prince of Wales was asked and consented to be the Patron of the English Cart-Horse Society. And I believe that an overwhelming majority of the members of the Society are in favour of the retention of that name.

Yours faithfully,

T. BROWN.

G. M. Sexton, Esq.,

Secretary of the "English Cart-Horse Society."

## Agricultural Societies.

### ROYAL OF ENGLAND.

The half-yearly general meeting of the members of this Society was held on 22nd May, in Hanover Square. The chair was taken at noon, in the absence of the President, His Royal Highness the Prince of Wales, by Colonel Kingscote, M.P., and among those present were Sir Watkin W. Wynne, M.P., Sir Walter Stirling, Sir J. Heron Maxwell, Mr. Robert Leeds, Mr. T. Aveling, Mr. John Thornton, Dr. Voelcker, Mr. W. Botly, Mr. C. L. Sutherland, Mr. W. W. Glenny, Mr. James, Odame, Mr. J. J. Mechi, Mr. R. Russell, Professor Wilson, of Edinburgh, &c.

The CHAIRMAN moved the election of the Duke of Bedford, as president for the year ensuing the London Exhibition, remarking that he need say nothing to endorse the recommendation of the Council, his Grace having done so much, not only for that Society but also for the agricultural community at large (Hear, hear).

The motion was seconded by Sir Watkin W. Wynn, M.P., and carried unanimously.

After the re-election of the Trustees and the Vice-Presidents the meeting proceeded to fill up the 25 vacancies in the Council, the result of the subsequent

scrutiny being that all the retiring members were re-elected except Mr. W. Ridden, who was replaced by Mr. Hugh Gorringe.

**ATTENDANCE, FROM THE RISING OF THE LIVERPOOL MEETING, IN 1877, TO THE PRESENT TIME.**

NAMES.	Mon. Coun- cils, Total. 14.	Committees.	
		No. of Meet- ings.	At- tend- ances.
Aveling, T., Rochester, Kent .....	13	62	55
Aylmer, Hugh, West Dereham, Stoke Ferry .....	8	23	9
Cantrell, Charles S., Riding Court, Datchet, Bucks .....	14	31	25
Chandos-Pole-Gell, H., Hopton Hall, Wirksworth, Derbyshire .....	10	61	47
Davies, David Reynolds, Agden Hall, Lymn, Cheshire .....	7	7	5
Evans, John, Uffington, Shrewsbury, Salop .....	4	12	1
Feversham, Earl of Duncombe Park, Helmsley, Yorkshire .....	7	4	—
Howard, Charles, Biddenham, Bedford ..	7	23	15
Jones, J. Bowen, Knadon House, Shrewsbury, Salop .....	11	72	60
Leeds, Roberts, Keswick Old Hall, Norwich .....	13	11	6
Lopes, Sir Massey, Bart., M.P., Maristow, Roborough, Devon .....	1	10	—
McIntosh, David, Havering Park, Romford, Essex .....	9	10	4
Martin, Joseph, Highfield House, Littleport, Isle of Ely, Cambs .....	10	26	13
Pain, Thomas, The Grove, Basingsstoke, Hants .....	9	15	5
Ransome, Robert Charles, Ipswich, Suffolk .....	11	40	20
Ravenworth, Earl of, Ravensworth Castle, Durham .....	4	4	1
Ridley, Sir M. White, Bart. M.P., Blagdon, Cramlington, Northumberland ..	5	51	15
Ridden, William, Hove, Brighton, Sussex .....	—	5	—
Russell, Robert, Horton Kirby, Dartford ..	11	5	3
Spencer, Earl, & G., Althorp, Northampton .....	3	—	—
Torr, John, M.P., Carlett Park, Eastham, Chester .....	6	9	2
Turner, George, Great Bowley, Tiverton, Devon .....	3	15	5
Turner Jacob, Haddon, Hunts .....	6	23	9
Wakefield, William H., Kendal, Westmoreland .....	8	49	24
Wilson, Jacob, Woodhorn Manor, Morpeth, Northumberland .....	9	56	44

**CANDIDATES proposed for the Council:—**

Lord Moreton, proposed by Colonel Kingscote, seconded by Mr. Bowly  
 Lord Emlyn, proposed by Mr. Wells, seconded by Colonel Kingscote  
 The Hon Cecil Parker, proposed by Lord Chesham, seconded by Sir A. K. Maedonald, Bart.  
 Mr. Hugh Gorringe, proposed by Mr. Jacob Wilson, seconded by Mr. Chandos Pole-Gell

The Secretary (Mr. H. M. Jenkins) read the Report of the Council, which was as follows:—

"The Council of the Royal Agricultural Society have the gratification of reporting that a large accession to the list of members has been obtained since the last General Meeting in December, no fewer than 3 Governors and 877 Members having been elected in the interval. On the other hand, the death of two governors and 47 members has been reported, and the names of 96 members, who resigned in the course of the year 1878 have been removed from the list. The Society now consists of:—

81 Life Governors,  
 73 Annual Governors,  
 2,453 Life Members,  
 4,700 Annual Members,  
 26 Honorary Members,

making a total of 7,332, and showing an increase of 535 since the December meeting. In the last half-yearly report the

Council announced the resignation of Mr. Milward, of Thurgarton Priory; Notts, as a trustee of the Society, and they much regret that they now have to report the death of their valued colleague, who had been a most active member of Council for more than 30 years. The vacancy in the list of Vice-presidents which existed in December has been filled up by the election of Mr. John Bennett Lawes, F.R.S., of Rothamsted; and the vacancies in the Council have been filled up by the election of Mr. Samuel Porter Foster, of Kilhow, Carlisle, and Mr. Robert Neville, of Butleigh Court, Glastonbury. The accounts for the year 1878 have been examined and certified by the auditors and accountants of the Society, and have been published in the last number of the *Journal*, together with the statement of receipts and expenditure connected with the Bristol meeting. The funded property of the Society has since been reduced by the sum of £2,031 4s. 5d. New Three per Cents., which has been sold out to meet some of the preliminary expenses of the London Exhibition; and it now stands at £24,430 7s. 0d. New Three per Cents. The balance of the current account in the hands of the Society's bankers, on the 1st inst., was £7,222 17s. 8d. The London International Exhibition will commence on June 30th, and will continue for the six following days (Sunday excepted). It will be the largest and most varied agricultural show hitherto held, as the Council have taken the opportunity to include in the exhibition some novel features of great interest. Among these, it may be stated that the idea of a Comparative Loan Collection of Ancient and Modern Farm Implements has been well supported; and the thanks of the Council and of the members are due alike to the possessors of the old and the makers of the new forms of implements for their ready response to the appeal of the Council to aid them in this matter. It is intended to publish a special descriptive catalogue of this loan collection, which will doubtless be a valuable aid to the study of the history of farming machinery. The processes of foreign dairy manufacture have recently attracted so much attention, in consequence of the large importations of foreign cheese and butter during the last few years, that the Council have endeavoured to secure the representation of some foreign as well as English dairy processes in actual operations, and they are glad to state that the German, Scandinavian, and French, in addition to some of the English processes will be represented in an International Dairy, in the forthcoming exhibition. The implement industry of the country will be represented by an unusually large number of exhibitors, while special novelties will be introduced by French, Belgian, and German makers. National collections of the agricultural produce of several countries will also form a special feature of interest and instruction. Three Railway Waggon prizes have been entered to compete for the gold medal and Fifty Pounds Prize offered by the Mansion House Committee for the best Waggon for conveying perishable goods, such as meat, poultry, fish, &c., by railway at a low temperature, a journey of 500 miles, the waggon to retain their contents at a temperature not exceeding 45° Fahr. for six days. The Exhibition of Live Stock will be on a scale of equal magnitude with that of Implements in both the foreign and English sections. The Council have taken the utmost precautions to prevent any importation of disease with foreign cattle, which will be placed in a portion of the Exhibition quite separate from the English cattle department. Under special orders issued by the Privy Council, suitable premises have been engaged as quarantine stations, and arrangements will be made for the inspection of all animals entered for exhibition previous to shipment and after landing, as well as on their arrival at the Exhibition after having undergone the period of quarantine required by the Privy Council. The Council have much pleasure in calling attention to the support which has been given to the London meeting by the several Agricultural Stud and Herd Book Societies and similar associations, most of which have offered champion or special prizes for animals of the breeds in which they are respectively interested. The co-operation of such institutions with the Royal Agricultural Society must, in the opinion of the Council, have a great influence in promoting the objects which are common to both. The district assigned for the country meeting of 1880 comprises the counties of Northumberland, Durham, Cumberland, and Westmoreland; and the Council have decided to accept the very cordial invitation which they have received from the Mayor and Corporation of Carlisle to hold the country meeting of next year in that city.

The Council have selected for the country meeting of 1881 the district comprising the counties of Derby, Leicester, Lincoln, Northampton, Nottingham, and Rutland. As reported at the last half-yearly meeting, the Council have provided a laboratory for a consulting chemist on the Society's premises, and have entered into a new arrangement with Dr. Voelcker, whereby the cost of analyses to members, under certain regulations, has been reduced to about one-half the previous rates. A statement of these and other revised privileges having been sent to each member of the Society, the Council have the satisfaction of reporting that since the opening of the new laboratory a very large addition to the number of members during the same period of the year has been received for analysis by Dr. Voelcker. The Council have further made a new arrangement with the Governors of the Royal Veterinary College, by virtue of which the officers of that institution will act as Veterinary Inspectors to the Society on terms similar to those which have hitherto been paid by the members for professional aid in cases of disease of cattle, sheep, and pigs. This arrangement has worked very satisfactorily during the few months that it has been in operation, and the reports from the professors of the college, on the principal cases which have come under their observation, which are published in the proceedings of the monthly Council meetings, are deserving of the careful study of all stock-owners. In consequence of the arrival at Liverpool of a number of cattle from the United States of America affected with pleuro-pneumonia, the Council urged upon the Government the importance of immediately placing the United States under the provisions of the Contagious Diseases (Animals) Act (1878), which provides for the slaughter of foreign animals at the place of landing, and an Order in Council with that object was issued shortly after. Of the graduates of the Royal College of Veterinary Surgeons who were eligible to compete for the Society's medals and prizes, offered for proficiency in cattle pathology, only one (Mr. John Herbert Callow) presented himself for examination last January. The examiners awarded him the gold medal and first prize of £20. The examiners reported that, in their opinion, the absence of competitors was in consequence of the conditions of qualification for competition being too stringent; and the Council of the Royal College of Veterinary Surgeons having taken the same view, it has been arranged that in future the competition shall be open to candidates who have taken honours in cattle pathology at the final examination of the college, and who shall have taken their diploma not more than two years before the date of the examination. Twelve candidates presented themselves at the recent examination for the society's prizes and certificates, but only three satisfied the examiners on all the necessary subjects, thereby gaining the first-class certificates and life membership of the Society, as well as qualifying themselves to earn payments as teachers of the principles of agriculture under the departments of Science and Art. The successful candidates were:—A. E. Brooke-Hunt, first-class certificate, life membership, prize of £25 (educated at Cirencester); Lawford D. Gover, first-class certificate, life membership, prize of £15 (educated at Cirencester); Robert Wallace, first-class certificate, life membership, prize of £10 (educated at Edinburgh). Upon the representation of the Council, the Science and Art Department of the Committee of Council on Education have agreed to accept the diploma of the Royal Agricultural College, Cirencester, and the first-class certificate of the Royal Agricultural Society, as qualifying the holders to earn payments on the results of their instruction in the principles of agriculture without their undergoing a special examination for that purpose.

"By Order of the Council,

"H. M. JENKINS,  
"Secretary."

Sir J. HERON MAXWELL, in moving the adoption of the report, congratulated the meeting on the increase in the number of members. For some years, he observed, the Council had to announce with regret an actual decrease, but the report now presented showed an increase of 535 since the meeting last December. That fact showed that the appeal which was made has been cordially responded to; and the increase was the more satisfactory as evincing

that notwithstanding the present downcast look of agriculture the agricultural interest desired to manifest its firm attachment to that Society. Of course the principal thing which had engaged the attention of the Council recently, and which would do for the next four weeks, was, the grand London International Exhibition. He must say that as a member of the Finance Committee, he felt, in common with the Chairman, that Londoners had not come forward as readily, and as liberally as they might fairly have been expected to do under such circumstances. The subscriptions for next year's show at Carlisle amounted to almost as much as the amount obtained from London for the Exhibition about to be held there. Perhaps a little hint on that subject might yet do good. The Council had a few weeks before them to receive additional assistance, and he hoped it would be forthcoming. There was an important paragraph in the report relating to disease among cattle, sheep, and pigs, and he felt sure the members would all feel grateful to the Council for the means that had been adopted for preventing or stamping out, or reducing the disease, and which had been attended with so much success. There appeared to be new diseases springing up among animals as well as among human beings, and typhoid fever, which he believed was quite a recent disease among pigs, had been treated very successfully. Carcasses had been destroyed to prevent infection, and he hoped that as the result of the measures adopted, that form of disease would soon cease to exist. Although there was at present a cloud hanging over the agricultural interest throughout England, and extending over a large portion of Scotland also, he trusted that it would soon pass away, and that both landlords and tenants would find themselves in a better position than they had been for the last twelvemonth.

Mr. W. YATES FREEBODY, in seconding the motion, said he wished to allude to what was to him a very important matter. It appeared that the Society had then to their credit the sum of £31,652. Many years ago, as some of those present might remember, the late Mr. Raymond Barker, who was a leading member of the Finance Committee, spoke of the wonderful things which the Society would do if it only had £10,000. The Society had now not merely £10,000, but upwards of £30,000, and he must say he did not think as much had been done as ought to have been done with the funds at the disposal of the Council. As regards the International Exhibition, which would shortly be held at Kiburn, he regretted that the Council of that great Society had thought it necessary to send round the hat, instead of relying on that back-bone of the country, the farming interest.

The motion was then put, and carried.

On the motion of Mr. Kimber seconded by Mr. F. King, a vote of thanks was given to the auditors.

The CHAIRMAN having then invited all present, in accordance with custom, to make some remarks or suggestions for the consideration of the Council,

Mr. W. YATES FREEBODY said he had a suggestion to make relating to a subject of great practical interest to the farmers of this country; it was that the Council should instruct qualified persons to furnish reports of the corn growing and meat producing capabilities of America, Canada, Russia, India, Australia, and New Zealand, with regard to the probable supply of food intended for the English market. Information obtained in that way would, he remarked, be much better than the official information supplied in Blue Books, and he hoped that if his suggestion was adopted the Council would send out men who were well qualified for the work. He feared that the suggestion would, like others which had been made, be pooh-poohed, but nevertheless he submitted it as one well deserving attention.

Mr. MECHI suggested that lecturers should be sent by the council to some of the least advanced parts of the country as regarded agriculture, for the purpose of enlightening farmers; adding that such a course had already been pursued abroad with good results. There was he remarked, one great source of satisfaction; he congratulated the Society on having so efficient a Secretary, and one whose services were of so much value to agriculture (Hear, hear).

No one having risen to make any other remark or suggestion,

Professor WILSON, of Edinburgh, proposed a vote of thanks to the chairman, which was seconded by Mr. GLENNY, and carried by acclamation.

The CHAIRMAN on rising to respond, said he must first state what he ought, perhaps, to have mentioned before, that the President, His Royal Highness the Prince of Wales, had expressed his regret at his inability, owing to a previous engagement, to be present that day. With the permission of the meeting he would now make one or two remarks. As regarded the International Exhibition, he thought they must all feel it to be of the greatest importance that everything should be done in the very best manner. They might congratulate themselves on the entries, and he was sure that no pains would be spared by the officials of the Society in managing the Show in such a manner that everything would be seen by the public with the greatest advantage. He also trusted that the inhabitants of the metropolis would join in and make it the fashion to attend the Show, feeling certain that they would see there what thousands and tens of thousands of them had never seen before, and what must afford them a great deal of instruction. As regarded the Mansion House Committee he regretted that the amount collected was not larger. When they had gone to other large towns the expenses of the ground had been paid for them; in the present case the ground would cost them £4,000, and as the other £4,000 of the total subscribed in London would be devoted to prizes, they would virtually receive nothing whatever. They must, therefore, trust for the financial success of the Exhibition to the receipts, and he hoped that with fine weather there would be a very large attendance, so that the funds of the Society would not suffer. As regarded those funds he must say he thought it would be most detrimental to the interests of the Society if it had a hand-to-mouth policy, that was, if the income were all spent and nothing was funded. They had in fact only £24,000; the balance in excess of that amount would be expended very shortly on account of the Exhibition. He did not know how without funded property they could have undertaken to give prizes for veterinary proficiency, a new phase of the Society's work, and one which he knew was highly appreciated by the members of the Royal Veterinary College. He thought the meeting would agree with him that in giving these prizes the council were going in a right direction, and that they were also going in the right direction when they reduced the fees for laboratory work (Hear, hear). The number of members ought to be raised from 7,000 to 10,000 with the greatest ease, but the increase which had taken place even in these bad times showed that there was life in the old dog yet (cheers). The suggestion of Mr. Freebody had, he could assure him, already undergone a long discussion before the *Journal* Committee, at least as regarded the Indian and Australian food supply if they were to undertake such a work as Mr. Freebody had pointed to the £24,000 would very soon be gone (Hear, hear). In concluding the Chairman congratulated the meeting that notwithstanding the great competition of the weekly agricultural press the Society's *Journal* contained so much that was interesting and valuable to agriculturists.—The meeting then separated.

## BATH AND WEST OF ENGLAND.

The hundred-and-second Annual Exhibition of this Society will be held at Exeter, on the five days commencing Whit Monday, June 2nd. The Show Yard, which occupies a picturesque site on the Topham Road, is at a convenient distance from the "ever-faithful" city, and will doubtless be visited by large numbers of agriculturists and holiday-keepers from all parts of the Kingdom when its gates are opened to the public.

As will be readily seen on reference to the figures quoted below, the collection of machinery, implements and live stock in the Exeter Show Ground will fully entitle the Show of 1879 to be characterised as "great." And on comparing the entries with those at the Meeting of the Society last held in Exeter, 16 years ago, evidence is at once offered, both by the numbers and character of the exhibits, of the immense and rapid growth of the Society's operations.

In the Department of Live Stock there were in 1863 only 419 entries, including a large number of animals shown as extra stock, which are now systematically declined by the Society, although frequently, as was the case this year, many extremely valuable animals have been offered by their owners for exhibition. In the present year the total number of entries is 661, of which 123 are horses. The cattle include 38 Devons, 43 Shorthorns, 33 Herefords, 48 Sussex, 50 Jerseys, and 38 Guernseys. There are 207 pens of sheep, among which are 21 Leicesters, 21 Cotswolds, 44 Devon Long-wools, 28 Southdowns, 28 Hampshire Downs, 18 Somerset and Dorset Horns, and 14 Exmoors. Of Pigs there are 61 entries, of which 35 are Berkshires. Each section of the Stock Department contains specimens from all the most successful breeders in England, and there is good reason to presume that the exhibition will be one of unusual merit in many of its classes.

In the Poultry Department there are 401 entries of which 114 are Pigeons. These figures, however, in many cases representing a pair of birds to each entry, the total number of birds staged will, of course, be greatly in excess of that number.

The exhibition of implements, although somewhat less, perhaps, than the Shows of the last two years, will be remarkable not only for its extent, but for its generally attractive character. Much interest will doubtless be excited in the trial of the sheaf-binders which will be shown in active operation in the Trial Fields, where, also, a large number of mowers, reapers, haymakers, and other labour-saving machines will be actually tested upon the crops provided for the purpose. There will be 59 compartments of machinery in motion, being the same number as at the great Bristol show in 1874, and 35 more than at the last Exeter meeting.

The Picture Gallery will contain a collection of the works of a large number of Western Artists, in addition to numerous contributions from residents in London and more remote parts of the kingdom. A number of choice paintings and other works of art will be exhibited, on loan, under the care of an influential local committee, appointed for the purpose.

The Horticultural Department will, as usual, form an attractive feature of the Exhibition, and will consist of a number of rich specimens from Devon and the adjacent counties.

The open judging of stock will commence precisely at 10 o'clock on Monday, June 2nd, the gates being opened to the public an hour previously. On Tuesday, at noon, the annual meeting of the Society will be held in the Show Yard, under the presidency of the Earl of Morley, when the report of the Council will be presented, and the President and twenty-three members of the Council elected. The prizes offered by the Society for horse-

shoeing at portable forges in the yard will be competed for on Wednesday by smiths representing each of the Western counties. The bands of the Royal Marines and Grenadier Guards have been engaged, and on Wednesday afternoon they will in combination play a selection of concerted pieces.

Although there is a turnpike gate between the city and the Show Yard, yet there is no necessity for the public to go through it, as there is a level public road, *via* Mount Radford, without any turnpike gate intervening.

#### PROGRAMME.

**MONDAY, 2nd JUNE,** admission, 2s. 6d., open from 9 a.m. to 6 p.m.—The open judging in the showyard of cattle, sheep, horses, and pigs commencing at 10 a.m. The poultry tent open as soon as the birds are judged, and until 6 p.m. Implement department open at 9 a.m. Arts department open at 10 a.m. Implements of various kinds to work at intervals in the trial fields; mowers from 10 to 1; reapers and sheaf binders from 2 to 5. Horticultural department open at 2 o'clock. Band of the Royal Marines at 1.30 o'clock.

**TUESDAY,** admission, 2s. 6d., open from 9 a.m. to 6 p.m.—The cattle, sheep, horses, pigs, poultry, implements, and arts departments open from 9 a.m. to 6 p.m. Weather permitting, the cattle to be paraded in the ring at 12, and the horses at 2. The horticultural department open from 10 a.m. to 6 p.m. Annual meeting of members in the council tent at 12 noon, under the presidency of the Earl of Morley. Implements of various kinds to work at intervals in the trial fields; mowers from 10 to 1; reapers and sheaf binders from 2 to 5. Band of the Royal Marines at 11 a.m.

**WEDNESDAY,** admission, 2s. 6d., open from 9 a.m. to 6 p.m.—The cattle, sheep, horses, pigs, poultry, implements, and arts department open from 9 a.m. to 6 p.m. Weather permitting, the cattle to be paraded in the ring at 12, and the horses at 2. The shoeing of horses at portable forges at 10 a.m. The horticultural department open from 10 a.m. to 6 p.m. Band of the Royal Marines at 11 a.m. Band of the Grenadier Guards at 2.45 and 5 p.m. Concerted pieces by the united bands at 3.30.

**THURSDAY,** admission, 1s., open from 9 a.m. to 6 p.m.—The cattle, sheep, horses, pigs, poultry, implements, and arts department open from 9 a.m. to 6 p.m. Weather permitting, the cattle to be paraded in the ring at 12, and the horses at 2. The horticultural department open from 10 a.m. to 6 p.m. Band of the Grenadier Guards at 11 a.m.

**FRIDAY,** admission 1s., open from 9 a.m. to 5 p.m.—The cattle, sheep, poultry, pigs, horses, implements, and arts departments open at 9 a.m. Weather permitting, the cattle to be paraded at 11 o'clock, and the horses at 1. The horticultural department open from 10 a.m. to 5 p.m. Band of the Grenadier Guards at 10.30 a.m., concluding at 4.15 p.m. Drawing of the Art Union at 2.30 p.m. All stock (excepting in Classes 72 and 77) to remain in the yard until 3 o'clock p.m. Poultry tent closed at 5 p.m., before which time no poultry can be removed without special order.

#### DEVON COUNTY.

The Show opened on May 20th amid a slight misty rain, but about noon the moisture disappeared, and the remainder of the day was fine. The opening day confirmed the opinion that the Exhibition is a comparatively small one, and the attendance was not equal to that on the first day of most previous Shows.

The cattle made in every class a show of very high excellence, and the number of animals exhibited was nearly the same as last year. An analysis, however, shows a great variation in the classes. The Devon were only 38, as against 67 last year, but the South Devons have gone up from 14 to 31; the Shorthorns have taken a step backwards, from 87 to 84, but the Channel Islands are in exactly the same force as last year. The total number of live stock entered 485—horses 157, cattle 134, sheep 157, pigs 87. The Devons exhibited were a credit to the breed. The old bulls shown are all prize

takers. Now, as on many previous occasions, Viscount Falmouth heads the list, his Lordship carrying off the blue ribbon with "Sirloin," a rather small but remarkably level animal, of high quality, whose only fault in form is a slight falling off over the shoulders.

The South Devon were a larger show than the Society has had at either of its three last exhibitions, and although some of the old angular type are still found, yet, as a whole, the South Devons are far more shapely than they used to be. Though they are not a very striking breed for show purposes, yet they are highly prized in the South Hams on account of the large quantity of milk they give, and the South Hams farmers swear by them as the most rapid producers of beef.

The Shorthorns made a grand show, and the exhibitors included the most noted breeders in the Western Counties. One of the well-known Baron Wild Eyes family, sent by Mr. Dunning from Taunton, is first among the old bulls, and in the next class all three prize winners are splendid beasts. The yearling bulls were headed by a superb white "Lord Oxford," exhibited by Messrs. Hosken, of Hayle, whilst next to him is "Osmanli," sent by Mr. Bristol, of Shaftesbury, and the third is a black and white, "Lord Taunton," a son of the first prize beast in the old bull class. The first prize cow is a mottled four-year-old, "Carnation," the fourth of the family shown by Messrs. Hosken; a magnificent pure white with enormous back and sides, sent by Mr. Bult, of Taunton, is second, and comes from the "Grand Sultan" strain. In all the heifer classes Messrs. Hosken and Son are first with the progeny of the "Duke of Oxford" and "Wild Eyes."

The Channel Islands Cattle were also a very excellent show, but the judging gave rise to much complaint.

The Exhibition of Sheep was, next to fat Cattle, the great feature of the Show. Some exceedingly fine animals were penned, and there were representatives from all the most important breeds of the country. In numbers the sheep compared well with any previous entries for this exhibition, although from the situation of the yard this year there was a preponderance in certain classes, which gave the judges some trouble in awarding the prizes.

The Horses make altogether a most satisfactory show both in the quantity and the quality, this department being one of the best filled in the exhibition. As a rule the competition was remarkably keen, and severely taxed the discrimination of the judges. The total number of horses entered this year was 159, against 148 at Hoxton last year, and 152 at Tavistock the previous year. The agricultural horses, however, as a whole, were hardly up to the average. Class 2 came out the best, and the awards seemed to meet with general approval.

There being only five classes of Pigs, containing 36 entries in all, the competition was not very severe.

#### PRIZE LIST

**JUDGES.**—HORSES: J. Jackman, Kelly, Tavistock; J. Michelmore, Sherford, Kingsbridge; W. Trist, Ugborough, Iybridge; Earl of Portsmouth, Eggesford House; T. Potter, jun., of Yellowford, Thorverton; G. Lobb, Lawhitton, Launceston. CATTLE: R. Stranger, Court House, Northmolton; T. Powlesland, Stockleigh Pomeroy, Cretton; H. Taylor, Stancombe, Totnes; E. B. Cornish, Torr, Mounta, Devon; J. Fairweather, Malton, Kingsbridge; J. K. Fowler, Prebendall Farm, Aylesbury; H. Tait, Prince Consort's Shaw Farm, Windsor. SHEEP AND PIGS: J. Tapp, Iwicheas, Southmolton; T. Marrie, Croxton, Ulooby, Lincoln; —. Harding, Bovey Barton, Beer, Axminster. SHEEP AND SHEEP SHEARING: H. Gibbings, Brenton, Kennford; G. May, Parsonage, Ermington, Iybridge; E. Osmond, Woodrow, Exeter. WOOL: S. Churchward, Backfastleigh.

#### HORSES.

FOR AGRICULTURAL PURPOSES.

Stallions, foaled before the 1st January, 1876.—First prize,

E. Shinner, Buckfastleigh; second, J. Powlesland, Okehampton; third, W. Bray, Launceston.

Stallions, foaled on or after 1st January, 1876.—First prize, G. Jeffery, Bridestowe; second, N. Cook, Tiverton; third, J. Bickle, Bristow.

Mares in foal, or having a foal by their side.—First prize, T. Willing, Tavistock; second, S. T. Tregaskis, Saint Issey, Cornwall.

Geldings or fillies, foaled in 1875.—First prize, J. Stephens, St. Columb Minor; second, Dr. C. Budd, North Tawton.

Geldings or fillies, foaled in 1876.—First prize, W. Turpin and Sons, Plympton; second, J. Adams, Ivybridge.

Geldings or fillies, foaled in 1877.—First prize, J. Northcote, Devonport; second, J. W. Hallett, Roborough; third, Mrs. A. H. Butcher, East Stonehouse.

Colts, geldings, or fillies, foaled in 1878.—First prize, H. Auckland, Hatherleigh; second, J. Tucker, Kingsbridge; third, J. Michelmores, Totnes.

#### HUNTERS.

Calculated to carry not less than 13 stone.

Mares in foal, or having a foal by their side.—First prize, S. W. W. Stephens, Wadebridge; second, J. West, Wadebridge.

Geldings or mares, foaled before the 1st January, 1875.—First prize, W. Trist, Ivybridge; second, G. B. Battams, Tavistock; third, W. Trist.

Geldings or fillies, foaled in 1875.—First prize, G. B. Battams; second, J. Harper, Barnstaple; third, G. B. Battams.

Geldings or fillies foaled in 1876.—Prize, F. H. Firth, Ashburton.

Geldings or fillies foaled in 1877.—First prize, G. B. Battams; second, G. B. Battams; third, H. Soper, Ivybridge.

Colts, geldings, or fillies foaled in 1878.—First prize, R. W. Pollard, Paignton; second, T. Ratallick, Bodmin; third, T. H. Newman, Lewdown.

#### HACKS.

Geldings or fillies.—First prize, N. Cook, Tiverton; second, T. Yelverton, Ottery Saint Mary; third, H. W. Thomas, Plymouth.

Geldings or mares foaled before the 1st January, 1877.—First prize, R. B. James, Bideford; second, R. Sercombe, Ivybridge; third, W. Jackman, Plymouth.

#### PONIES.

Ponies exceeding 12 hands and not exceeding 13½ hands.—First prize, T. Yelverton; second, D. Westaway, Tavistock.

Ponies not exceeding 12 hands.—First prize, W. Jackman; second, G. Arden, Exeter.

#### CATTLE.

##### DEVON.

Bulls exceeding three years old on the 1st June.—First prize, Viscount Falmouth, Frobus; second, C. Reed, Lewannick; third, A. E. Gould, Poltimore.

Bulls above two and not exceeding three years old on the 1st June, 1879.—First prize, Viscount Falmouth; second, A. C. Skinner, Bishops Lydeard; third, Col. Buller, C.B., of The Downes, Crediton.

Bulls above one and not exceeding two years old on the 1st June, 1879.—First prize, R. Julian, Grampond; second, Viscount Falmouth; third, W. Perry, Leydown.

Bulls not less than six nor exceeding twelve months old on the 1st June, 1879.—First and second prizes, W. B. Fryer, Lytchett Minster; third, W. Smith, Whimble.

Cows exceeding three years.—First prize, W. B. Fryer; second, W. Perry; third, Dr. C. Budd, North Tawton.

Heifers not exceeding three years.—First prize, Mrs. M. Langdon, Northmolton; second, W. H. Walrond, Topham.

Heifers not less than twelve months nor exceeding two years old on the 1st June, 1879.—First prize, W. B. Fryer; second, Mrs. M. Langdon, third, W. R. Fryer.

Heifers not less than six nor exceeding twelve months old on the 1st June, 1879.—First prize, Sir J. H. Heathcote-Amory, Bart., M.P., Tiverton; second, W. R. Fryer.

##### SOUTH DEVON.

Bulls exceeding 3 years old on the 1st June, 1879.—First prize, J. Horsford, Plympton, St. Mary; second, W. G. Grilla, Berry Pomeroy; third, W. Wroth, Newton Abbott.

Bulls above 2 and not exceeding 3 years old on the 1st June, 1879.—First prize, B. J. W. Sambell, Lestwithel; second, J. B. Oldrieve, Dartmouth; third, J. Wroth, Kingsbridge.

Bulls above 1 and not exceeding 3 years old on the 1st June, 1879.—First prize, G. Gillard, Kingsbridge; second, J. S. Ford, Yealampton; third, J. Willcocks, Yealampton.

Bulls not less than 6 nor exceeding 12 months on the 1st June, 1879.—First prize, B. W. Coker, Plympton; second, J. S. Ford; third, B. W. Coker.

Cows exceeding 3 years old on the 1st June 1879, in calf, or having had a calf within 4 months preceding the 1st day of exhibition.—First prize, B. W. Croker; second, G. Dewdney, Plympton.

Heifers not exceeding 3 years old on the 1st June, 1879, in calf, or having had a calf within 4 months preceding the 1st day of exhibition.—First prize, B. W. Coaker; second, B. Oldrieve, Dartmouth; third, J. Adams, Ivybridge.

Heifers not less than 12 months nor exceeding 3 years old on the 1st June, 1879.—First prize, J. B. Oldrieve; second, G. Dewdney; third, J. B. Oldrieve.

Heifers not less than 6 nor exceeding 12 months old on the 1st June, 1879.—First prize, J. B. Oldrieve; second, J. Adams.

##### SHORTHORN.

Bulls.—First prize, J. H. Danning, Taunton; second, W. Hewett, Taunton.

Bulls.—First prize, R. W. Pollard, Paignton; second, W. Chapman, Corwall; third, J. S. Bait, Taunton.

Bulls.—First prize, W. Hosken and Son, Corwall; second, E. Bristol, Shaftesbury; third, W. H. Hewett.

Cows exceeding 3 years old on the 1st June, 1879, in calf or having had calf within 4 months preceding the first day of exhibition.—First prize, W. Hosken and Sons; second, J. S. Bult, Kingdon; third, J. Cruise, Brandisecorner.

Heifers not exceeding 3 years old on the 1st June, 1879, in calf or having had calf within 4 months preceding the first day of exhibition.—First and second prizes, W. Hosken and Son; third, W. H. Hewitt, Taunton.

Heifers not less than 12 months old nor exceeding 2 years old on the 1st June, 1879.—First prize, W. Hosken and Son; second, W. H. Hewett, Taunton; third, W. Hosken and Son.

Heifers not less than 6 nor exceeding 12 months old on the 1st June, 1879.—First prize, W. Hosken and Son; second, W. Trethewy, Grampond Road.

##### CHANNEL ISLANDS—JERSEY OR ALDERNEY.

Bulls exceeding one year old on the 1st June, 1879.—First prize, E. H. Crocker, St. Germans; second, W. H. Walrond, Newcourt.

Cows exceeding 3 years old on the 1st June, 1879, in calf or having had calf within 4 months preceding the first day of exhibition.—Prize, G. D. W. Digby, Sherborne.

Heifers not exceeding 3 years old on the 1st June, 1879, in calf or having had calf within 4 months preceding the first day of exhibition.—First and second prizes, Lord Poltimore, Exeter.

##### GUERNSEY.

Bulls.—First prize, R. N. G. Baker, Exeter; second, T. D. Eva, Cambourne.

Cows.—First and second prizes, R. N. G. Baker.

Heifers.—First prize, R. N. G. Baker; second, W. Brenton, St. Germans.

##### SHEEP.

##### LEICESTERS.

Yearling rams.—First and second prizes, W. Tremaine, Polvue, Grampond; third, G. Turner, Great Bowly.

Rams of any other age.—First prize, W. Tremaine; second and third, G. Turner.

Pens of 5 yearling ewes.—First prize, W. Tremaine.

##### SOUTH DEVONS.

Yearling rams.—First prize, J. Stooke, East Sherford; second, J. S. Hallett, Sherford Barton; third, R. B. Trant, Tregill.

Rams of any other age.—First prize, J. S. Hallett; second, R. B. Trant; third, J. Fairweather, Malston.

Pens of 5 yearling ewes (to be shown in their wool).—First prize, J. Willcocks, Winsor.

Pens of 5 ewes of 2 years old and upwards (to be shown in their wool and suckling their lambs).—First prize, J. Willcocks; second, J. Willcocks; third, J. S. Hallett.

##### DEVON LONG WOOLS.

Yearling rams.—First prize, Sir J. H. Heathcote-Amory, M.P., Knightshayes Court; second, G. Thorn, Widdle Farm, Williton; third, C. Norris, Motion, Exeter.

Rams of any other age.—First prize, W. Drakes, Lunces-ton; second, Sir J. H. Heathcote-Amory, M.P.; third, A. Bowerman, Taunton.

Pen of 5 yearling ewes.—First prize, Sir J. H. Heathcote Amory, M.P.; second, C. Norris.

Pens of 5 ewes of 2 years old and upwards.—First and second prize, C. Norris.

#### DARTMOOR.

Yearling rams.—First and second prize, J. Drew, Tavistock; third, J. L. Brembridge, Okehampton.

Rams of any other age.—First prize, J. Knapman, Okehampton; second, J. Knapman; third, J. Knapman.

Pens of five yearling ewes.—First and second prize, J. Drew; third, J. L. Brembridge.

Pens of five ewes of two years old and upwards (to be shown suckling their lambs).—First prize, J. L. Brembridge.

#### EXMOOR.

Yearling rams.—First prize, Mrs. M. Langdon; second Lord Poltimore, Poltimore Park, Exeter; third, Earl Fortescue, Southmolton.

Rams of any other age.—First prize, C. Williams, Barnstaple; second, Mrs. M. Langdon.

Pens of five yearling ewes.—First and third prize, Lord Poltimore.

Pens of five ewes of two years old and upwards (to be shown in their wool and suckling their lambs).—First and third prize, Earl Fortescue; second, Lord Poltimore.

#### SOMERSET AND DORSET HORNS.

Yearling rams.—First, second and third prize, H. Farthing, Bridgwater.

Rams of any other age.—First and second prize, J. Culverwell, Bridgwater; third, H. Farthing.

Pens of five yearling ewes.—First and second, J. Mayo, Dorchester.

#### SHERPESHIRE.

Yearling rams.—First and second prize, Viscount Falkmouth.

#### PIGS.

##### LARGE BREED (BLACK).

Boars not less than 6 months.—First prize, A. Tucker, Harberton; second, J. H. Anthony, Yealampton.

Sows of any age in farrow or exhibited with their litters.—First and second prize, Mr. J. H. Anthony.

##### SMALL BREED (BLACK).

Boars not less than 6 months.—First prize, Rev. W. Hooper, Dorchester; second, W. Bon, Holworthy.

Sows of any age in farrow exhibited with their litters.—First prize, Rev. W. Hooper; second, Earl Portsmouth.

##### LARGE BREED (WHITE).

Boars not less than 9 months.—First and second prize, R. E. Duckering, Lincolnshire.

Sows of any age in farrow, or exhibited with their litters.—First and second prize, R. E. Duckering.

##### SMALL BREED (WHITE).

Boars not less than 6 months.—First and second prize, Lord Moreton, Gloucestershire.

Sows of any age in farrow or exhibited with their litters.—First and second prize, Lord Moreton, Gloucestershire.

##### BERKSHIRE.

Boars not less than 6 months.—First prize, C. Williams, Barnstaple; second, N. Benjafield, Dorset.

Sows of any age in farrow or exhibited with their litters.—First and second prize, C. Williams.

##### DRAY HORSES.

Mares or geldings of any age.—First prize, J. Pethick, Plymouth; second, W. B. Thomas, Plymouth.

##### AGRICULTURAL HORSES.

Mares or geldings of any age.—First prize, W. B. Thomas; second, J. Pethick.

##### HUNTERS.

Mares and geldings foaled between 1871 and 1875.—First prize, W. Trist, Ivybridge; second, W. Trist.

##### JUMPING PRIZES.

Mares or geldings exceeding 15 hands high.—First prize, T. H. Newman, Lewdon; second, R. L. Tapley, Brandis-corner.

Mares or geldings not exceeding 15 hands high.—First prize, F. T. Wyatt, Ivybridge; second, T. Yelverton, Ottery St. Mary.

##### SINGLE HARNESS HORSES.

Mares or geldings not under 14 nor exceeding 15 hands.—First prize, W. H. Gennys, Plymouth; second, W. Jackman, Plymouth.

##### DAIRY COWS.

Dairy cows of any age in milk.—First prize, J. H. Anthony; second, J. Wells, Devonport, Bueh.

##### CREAM AND BUTTER.

For the best 21lb. of Devonshire clotted cream.—First prize, J. H. Anthony; second, T. H. Newman; third, W. Bon, Teignmouth; fourth, F. C. Ford, Totnes.

For the best made 21lb. of Devonshire butter.—First prize, J. Butland, St. Budeaux; second, M. H. Elliott, Plymouth; third, E. R. Cornish, Totnes; fourth, J. Wroth, Kingsbridge.—*Western Times*.

## HADLEIGH.

The spring meeting of the Hadleigh Farmers' Club and Agricultural Association was held on May 23rd. The *Ipswich Journal* says:—

With respect to the agricultural horses, they were, as usual, the great feature of the exhibition. Though there was a slight falling off in numbers, the quality would have done credit to any district. There was a good sprinkling of bays amongst them, and most of the exhibits had plenty of size about them. To follow the catalogue, the stallions, which stand first in order, were not in strong force. The stallions, in point of numbers, are seldom, or ever, in keeping with the rest of the Show. The first prize went to Mr. G. K. Green, Naughton, whose fine, well-made horse is well known in the neighbourhood; and the second to Mr. D. Green, Somersham. Amongst the brood mares there were some very serviceable animals, Mr. Cooper's, Hadleigh, being specially so, and it took the first position. The geldings were a small class. Of the three which put in an appearance, the palm went to Mr. Jacobs. The other two were very useful animals, Mr. J. Scott being second. The three-year-old fillies were a very even class, and perhaps the best in the show. Two out of the four were shown by Mr. W. Byford, Glensford, and they took the two prizes, and the best of the two was a very choice filly. Mr. W. Wilson, Bayham, was to the fore in the class for colts under 27 months with a very smart looking colt, with plenty of quality about it. It was in tolerably good company, the 2nd prize going to Williamham. The next, that of fillies of the corresponding age, compared very favourably. Of the nine foals, there were several very promising ones, some of which may be heard of again at a future show at Hadleigh. The executors of Mr. Thos. Partridge sent a very good looking one, which took the first prize, the second being awarded to Mr. J. Scott. The President of the Society, Sir C. B. Rowley offered a prize of £5 for the best mare or filly in the show, and this deservedly went to a handsome three-year-old filly belonging to Mr. W. Byford.

The riding and nag horses are always a very attractive feature at the Hadleigh Show. This year, however, they were not at all up to the mark in point of merit. The hunters were very fair, the three prizes going to Mr. W. Kersey, Mr. C. J. Grimwade, and Mr. G. Wade respectively. The riding cobs were the redeeming feature of this part of the exhibition, and to mark their high commendation of the sense of the class, the judges awarded a high commendation to Mr. L. Juby's and Mr. W. Strutt's cobs, besides the two prizes which were taken by Mr. W. Jacobs and Mr. E. W. Archer. The harness horses, as usual, made a good display, though they found going rather heavy.

With reference to the neat stock it was considered to be up to the average in quantity and quality.

There were but few entries of sheep.

## OXFORDSHIRE.

### MEETING AT WOODSTOCK.

This was a fairly good and useful show, the largest, it is said, that the Society has yet had, with the exception of the Baulbury meeting in 1877. The entries of cattle numbered 92, of sheep 91, of pigs 23, and of horses 114.

The Shorthorns were the chief feature in the cattle



division, and a few well-known prize takers were present to contest the honours. The classes for bulls were not well filled, and there were no animals there of much moment. There was nothing to compete with Mr. Wodehouse's Royal Havering 2nd (25376), and Colonel Lloyd Lindsay's Churchbill (37996) in their respective classes, and the latter took the champion prize of £10 as the best bull in the yard. This bull was second in his class, as a yearling, both at Bristol and at Oxford last year, and we spoke of him there as promising and likely to make a goon bull, though by no means perfect. He is not a first-rate animal, though doubtless a very useful Shorthorn and rather showy. Mr. Wodehouse showed a nice red bull calf of good quality, but it was placed second. There were 13 cows in-milk or in-calf, above three years old, entered the ring. Here Mr. St. John Ackers' Princess Georgie was placed first. It will be remembered this cow was second at Oxford and the reserve number at Bristol last year. The good points about this animal are her undeniable quality, wide hips, good and deep quarters; but she is light in front, bare on her shoulders, slight through the heart, and patchy on her rump; thus combining some of the best and worst points of the Shorthorn breed. Mr. J. Walters' Merrymaid, placed second on the list, is an animal of a very different stamp and character; short on the leg, fine in bone, well covered with flesh all over, and the very reverse of Mr. Ackers' cow. She had a good calf by her side into the bargain, and plenty of milk for him. One class of men would have placed her first as unhesitatingly as another class of judges would place her second. So long as the Shorthorn breed has no definite standard of excellence, and so many varieties of type and character, judges will necessarily give their awards from different standpoints, and on-lookers will criticise from equally different points of view. The class for heifers in-milk or in-calf, under three years old, was a very good one. There were three animals of note competing for honours; namely Mr. Brassey's Jemima 4th, Mr. St. John Ackers' Lady Carew 3rd, and Mr. Ashby Ashby's Innocence. The first mentioned will be remembered as the winner of the first prize in her class, as a yearling, at the Royal, when Lady Carew 3rd was highly commended in the same class; these two heifers were in the same class together at Oxford last year, and in that case Jemima 4th was first, and the other was not noticed. Mr. Ashby Ashby's Innocence was in the next older class both at the Royal and the Bath and West, being highly commended at the former, and unnoticed at the latter. It will also be remembered that at Northampton Innocence and Lady Carew 3rd were in competition, when the latter was declared winner, and took, as well, the Champion Cup (Burghley Park Plate) as best animal in the yard, defeating the veteran bull Telemachus 6th. At Woodstock the tables were turned. Mr. Brassey's Jemima 4th was highly commended and made the reserve number; Lady Carew 3rd was placed second; and Innocence took not only first prize in the class, but the champion prize of £10 as the best horned animal in the yard. Jemima 4th is what our American friends call a "bloody" animal, and has the appearance of a well-finished steer. Lady Carew 3rd is of nice quality, as all Mr. Ackers' show animals are, and she has merits; but—leaving out of consideration her horns and muzzle—her rump is patchy, her brisket unsightly fat, and her girth behind shoulders not what it should be. Innocence is a better made heifer, better stamp altogether, and her points are good; but she is much too fat to serve any useful purpose to the breeder. She has recently calved, and is, of course, in-milk, though her udder is a mere farce. No doubt the judges found it difficult "to get away" from the fact of a calf having been dropped; but the real value of such qualification is doubtful. A paragraph

appeared last week respecting this animal, which reads as follows:—"Innocence, having brought a live bull calf on April 29, which, however, only lived a short time, as it came before the nine months, receives her Dumfries prize, and she will now be able to show in the cow class at Kilburn." That needs no comment. But it is a pity that judges have not the courage to disqualify animals which are practically unfit for breeding purposes, so that a pernicious system might be put an end to. The only difficulty would be in making a start, for the meeting at which such a system was fairly tried would probably be in a position to carry over the bulk of the prize money to the next year's show. Amongst the yearling heifers there were three which were good ones, namely, Mr. W. G. Garne's Duchess Warwick 3rd, Mr. R. Attenborough's Red Butterfly 4th, and Mr. J. Walters' Pride of Bearwood. The two former are reds, and there is very little choice between them; both are of excellent quality and have great merit. The award, however, was no doubt right, which gave first prize to Mr. Attenborough. Mr. Walters' heifer is a roan, and very stylish too, and was second as a calf at Oxford last year; but the reds were better.

The classes for "bulls, cows, and offspring," were made up partly by independent entry and partly by animals in other classes, and the competition was not bad. Mr. Wodehouse's bull Royal Havering 2nd turned the scale in favour of the family in which he appeared and secured the championship. The dairy cows were useful, and the class for pairs which must show "a good stock of milk" was very good indeed, Mr. Brassey winning with a couple of Shorthorns. There were a few Jersey cattle exhibited, chiefly by Mr. Simpson of Reigate and Mr. Brassey of Heythrop.

There was a very useful show of sheep, and the general quality was good, although there was nothing there at all out of the way. Mr. Brassey showed four Oxfordshire Down shearling rams of a very useful stamp and with good quality, and secured first and second prizes and commendation. Mr. G. Street's sheep were amongst the best of the remainder, consisting of representatives from the flocks of Mr. Treadwell, Major Dashwood, Messrs. J. and F. Howard, Mr. C. Hobbs, and others. In the class for older rams Mr. C. Hobbs was first with a very handsome sheep; Mr. Treadwell's second prize sheep was remarkably good in front, but had two very distinct ends to him. For shearing ewes Mr. Treadwell was first with a very nice pen indeed, good handling sheep, though not all alike in that respect. Mr. Brassey's second prize pen were of excellent quality, and had good style about them. The Cotswold sheep were also a very useful lot, and Mr. John Gillett found it difficult to win close at home. The shearing rams were 17 in number, and included entries from the flocks of Messrs. J. Gillett, T. and S. G. Gillett, R. Jacobs, B. Swanwick, and others, the Messrs. T. and S. G. Gillett, of Faringdon securing first honours, and Mr. John Gillett the second. In the class for older rams the Messrs. Gillett were again first with a sheep which took the Champion prize of £10 as the best long-woolled ram. With shearing ewes the Messrs. Gillett were second, Mr. R. Jacobs, of Burford, being first with a pen which secured the Champion prize of £10 for the best pen of long-woolled ewes in the yard, and very capital sheep they were, handling very firm, and being full of flesh not fat. There was a decent show of pigs.

Of agricultural horses there were a few useful entries but nothing out of the way; the fillies under two years old being about the best class. There was a moderate show of hunters and nag horses, and the jumping and driving trials were being looked forward to with considerable interest when we left the showyard.

The following is a list of the judges and their awards:—

## PRIZE LIST.

**JUDGES.**—**CATTLE:** E. Little, Lanhill, Chippenham; J. G. Attwater, Britford, Salisbury. **HORSES**—Hunters and Nags: R. G. F. Howard, Temple Bruer, Lincoln; G. Wise, Woodcote, Warwick. **Driving and Jumping Classes:** The Earl of Jersey, Viscount Valentia, Lord Norreys, A. W. Hall, M.P., Holford C. Risley, A. Brassey. **Agricultural Horses:** G. M. Sexton, Wheatstead Hall, Ipswich; R. Craddock, Lyncham, Chipping Norton. **SHEEP:** J. Case, Chesterton, Fakenham; W. Garne, jun., Aldsworth, Northleach. **Pigs:** T. Latham, and J. Tredwell, Winchendon.

## CATTLE.

Bull of any breed, three years and upwards.—First prize, W. H. Wodehouse, Hertford (Royal Havering 2nd); second, The Duke of Marlborough (Blenheim).

Bull of any breed, two years and under three years.—First prize, Col. R. Lloyd-Lindsay, Wantage (Shorthorn, Churchill); second, J. Dodwell, Thame.

Bull of any breed, one year and under two years.—First prize, Col. R. Lloyd-Lindsay (Shorthorn, Stamboul); second, W. Linton, York (Shorthorn, Arthur Benedict).

Bull calf of any breed, six months and under one year.—First prize, J. A. Mumford, Thame (Shorthorn, Country Boy); second, W. H. Wodehouse, Hertford (Royal Havering).

Cow of any breed (having produced a calf) in-milk or in-calf, three years and upwards.—First prize, B. St. J. Ackers, W. Linton, York (Shorthorn, Princess Georgie); second, J. Walter, M.P., Wokingham.

Heifer of any breed, in-milk or in-calf, two years and under three years.—First prize, G. A. Ashby, Rugby (Innocence); second, B. St. J. Ackers (Shorthorn, Lady Carew 3rd).

Heifer of any breed, for breeding purposes, one year and under two years.—First prize, R. Attenborough, Reading (Red Butterfly 4th); second, W. G. Garne, Broadmoor, Northleach (Duchess of Warwick 3rd).

Heifer calf of any breed, six months and under one year.—First prize, G. A. Ashby (Deborah); second, R. Attenborough (Whiteley Butterfly).

Bull, cow, and offspring of any breed (latter under twelve months).—Prize, W. H. Wodehouse.

Dairy cow of any breed, a good supply of milk to be the chief qualification.—First prize, J. Hutt, Thrupp (Dolly); second, R. Aldworth, West Hagbourne (Didcot).

Pair of cows of any breed, in-milk.—First prize, A. Brassey, Heythrop (Hope and Bohemian Duchess); second, J. Hutt Thrupp (Favourite and Fancy).

Jersey or Alderney bull, one year and under three years.—First prize, G. Simpson, Reigate (Prince Albert Victor); second, H. Barnett, Woodstock.

Jersey or Alderney cow, in milk or in calf, three years and upwards.—First and second prizes, G. Simpson (Her Majesty and Promise).

Jersey or Alderney heifer, under three years.—First and second, G. Simpson (Queen Dora and Mary).

**CHAMPION PRIZE.**—Best horned animal in the yard.—Prize, G. H. Ashby.

Best horned bull in the yard, under three years.—Prize, Colonel Lloyd-Lindsay.

Best cow or heifer in the yard.—Prize, G. A. Ashby.

## HORSES.

## HUNTERS AND NAGS.

Brood mare for breeding purposes.—Prize, M. Henry, Hyde Park.

Hunter, mare, or gelding, to carry at least 15 stone.—First prize, R. Phipps, Northampton (Hurricane); second, J. M. K. Elliott, Towcester (Valentine).

Hunter, mare, or gelding, to carry at least 12 stone, not over 5 years.—First prize, C. Sargent, Etonstone; second, R. Hall, Great Tew (Osman Pasha).

Cob, not over 14½ hands.—First prize, A. B. Adcock, Northampton (Jocko); second, B. T. Hodge, Henley-on-Thames (Little Wonder).

Nag horse (mare or gelding) for general purposes.—Prize, J. E. Parsons, Daventry.

Pony (mare or gelding) not over 13 hands.—First prize, C. B. Ridley, Oxford (Jet); second, H. Pratt, Woodstock.

## JUMPING PRIZES.

Mare or gelding that shall jump in the best form, the property of a tenant farmer.—First prize, E. N. Hadley, West-hide; second, T. Cook, Taddington.

Mare or gelding that shall jump in the best form, not exceeding 14½ hands.—To be decided this day (Thursday).

## DRIVING PRIZES.

Mare or gelding of 15 hands and upwards, to be driven in harness.—First prize, A. Boddington, Clifton; second, F. Symonds, Litchfield.

Mare or gelding, over 13 and under 15 hands, to be driven in harness.—To be decided to-day (Thursday).

Mare or gelding pony, not over 13 hands, to be driven in harness.—First prize, H. Pratt, Woodstock; second, C. B. Ridley, Oxford.

Mare or gelding, 15.2 and not over 16.1 hands, the property of a tenant farmer, got by a thorough-bred sire, to be driven in harness.—To be decided to-day (Thursday).

## AGRICULTURAL.

Entire cart horse, under four years old (foaled after January 1st, 1876).—First prize, R. Loder, Towcester, Clydesdale stallion (Scotland); second, Earl of Macclesfield (Peeping Tom).

Entire colt, not over two years old (foaled in 1877).—First prize, W. A. Underwood, Leighton Buzzard; second, W. Tomes, East Claydon, Winslow.

Mare with colt, or to foal this season.—First prize, R. Loder, Clydesdale mare (Maggie); second, W. G. Rowles, Kidlington, with colt.

Gelding above four years old (foaled before January 1st, 1875).—First prize, J. Bulford, Woodstock; second, A. H. Thursby, Leamington.

Mares above four years old (foaled before January 1st, 1875).—First prize, R. Loder (Jessie); second, W. Way, Wheatley.

Geldings above two years and under four years old (foaled after January 1st, 1876, but not after January 1st, 1878).—First prize, W. E. Bacchus, Banbury (Lion); second, J. Bulford.

Mares, above two years and under four years old (foaled after January 1st, 1876, but not after January 1st, 1878).—First prize, E. and A. Stanford; second, W. Way, Albury, Wheatley.

Geldings, not over two years old (foaled in 1877).—First prize, J. Bulford; second, G. Underwood, jun., Hemel Hempstead.

Fillies, not over two years old (foaled in 1877).—First prize, R. Loder (Jeannie Sprat); second, E. and A. Stanford, Ashurst.

Champion Prize for the best animal in Classes 27 to 34 inclusive, R. Loder, Whitebury.

## SHEEP.

Oxfordshire Down shearing ram.—First prize, A. Brassey, Chipping Norton; second, A. Brassey.

Oxfordshire Down ram, of any other age.—First prize, C. Hobbs, Fairford; second, J. Treadwell, Aylesbury.

Special prize.—Best ram in Classes 35 or 36.—C. Hobbs.

Pen of three Oxfordshire Down ram Lambs, born in 1879.—First prize, A. Brassey.

Pen of five Oxfordshire Down shearing ewes.—First prize J. Treadwell; second, A. Brassey, Chipping Norton.

Pen of five Oxfordshire Down breeding ewes in the wool and lambs, the ewes to be suckling their own lambs.—First prize, A. Brassey; second, J. Treadwell.

Pen of ten Oxfordshire Down ewe tags in the wool, not having been housed or separated from the entire flock previous to May 1, 1879.—First prize, A. Brassey; second, Executors of the late W. S. Hunt, Fawler.

Champion prizes.—Best short-wooled ram in the yard.—C. Hobbs. Best Pen of five short-wooled breeding ewes in the yard.—J. Treadwell.

Best long-wooled shearing ram.—First prize, T. and S. G. Gillett, Kilkenny; second, J. Gillett, Oaklands.

Long-wooled ram of any other age.—First prize, T. and S. G. Gillett, Faringdon; second, R. Swanwick, Cirencester.

Pen of three long-wooled ram lambs, born in 1879.—First prize, H. Akers, Black Bourton.

Pen of five long-wooled shearing ewes.—First prize, R. Jacobs, Burford; second, T. and S. G. Gillett, Faringdon.

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Pen of five long-woolled breeding ewes in the wool, and lambs, the ewes to be suckling their own lambs.—First prize, H. Akers, Black Bourton; second, S. G. Gillett.

Pen of five long-woolled ewe tegs in the wool, not having been housed or separated from the entire flock previous to May 1st, 1879.—First prize, R. Jacobs, Barford.

Champion prizes.—Best long-woolled ram in the yard.—T. and S. G. Gillett. Best pen of five long-woolled breeding ewes in the yard.—R. Jacobs.

#### FIGS.

Boar of any breed except Berkshire, not over 18 months.—First prize, W. Wheeler, Long Compton; second, G. Street, Maulden, Ampthill.

Sow of any breed except Berkshire, in farrow or with pigs.—First and second prizes, W. Wheeler, Long Compton. Berkshire boar, not over 18 months.—First prize, E. Tombs, Bampton.

Berkshire sow, in farrow or with pigs.—First prize, R. Humsfry, Shrivensham; second, W. Walter, Wokingham. Champion prize.—Best boar in the yard.—E. Tombs.

## Literary Notices.

**ARTIFICIAL MANURES.** By Georges Ville Translated by William Crookes. F.R.S. London: Longmans, Green, and Co. The complete title of this book is "Artificial Manures; their Chemical Selection and Scientific Application to Agriculture," and it consists of a series of lectures given at the experimental farm at Vincennes during 1867 and 1874-5. The writings of M. Georges Ville are very popular in France, and in the United States, where a translation of the work before us has been widely circulated. We are in some doubt whether we should recommend it to readers in this country, and we certainly cannot do so without a warning. Written in an interesting and admirably simple style, by an author who is a strong enthusiast on his subject, no one can read it without pleasure; and, detailing, as it does, the results of the experiments of several years' labour and research, no one who reads it with sufficient knowledge to enable him to determine what to accept and what to reject can fail to derive profit from it. On the other hand, we cannot regard M. Ville as a safe guide to the agricultural student, and we cannot exempt him from the charge which has been made against him of appropriating the discoveries of others without due acknowledgment. He still holds to his old theory that some plants have the power of absorbing and assimilating the free nitrogen of the atmosphere, although the best authorities consider that this idea has been completely exploded. The theory crops up frequently throughout the book before us, and although it does not vitiate many of the deductions and details of experiments, M. Ville's adhesion to it detracts from his authority as a teacher of agricultural chemistry. Again, the results of our author's experiments are so generally and so astonishingly in complete harmony with his theories, that we cannot avoid the suspicion that they were not all very carefully and exactly described. We do not attribute bad faith to M. Ville, but only think that his enthusiasm for pet theories has sometimes led him to overlook results which militate against them. This, at least, we know, that field experiments are necessarily carried on under such variable conditions, that they will not always, so to speak, "come to book" in the docile manner attributed to M. Ville's experiments. Similarly our author states theoretical results with a certainty and exactness which are perfectly astonishing, and certainly unwarrantable. For instance on page 51 he says: "We will grow some plants in calcined sand, the soil being provided with nitrogenous matter, and all the mineral matters which must be employed in these conditions with the exception of calcic carbonate. If twenty-two grains of wheat are sown the crop will weigh from 307 to 337 grains. This yield is

not altered by adding humus. Add humus to the sand, and the crop does not change. Substitute calcic carbonate for humus, and still there is no change. Add at the same time both humus and calcic carbonate, and the yield is increased in weight to 475 grains. These facts being practically of fundamental importance, I subjoin the following table:—

	Nature of Soil.	Yield Grains.
1.	Normal manure (a mixture of nitrogenous matter, calcic phosphate, potash, and lime) ... ..	Calced sand ... 337
2.	" " " " " " " "	Limed sand ... 337
3.	" " " " " " " "	Sand and humus 337
4.	" " " " " " " "	Sand with lime and humus ... 475."

Again, on page 132, M. Ville says: "It is not I who speak to you, but the experience of hundreds of years, which has everywhere proved the truth of this assertion—that a given quantity of manure will always produce double its weight of grain and straw, whether we use 1, 10, or 100 tons, or, in other words, twice as much is obtained from the soil as we give to it." Other instances of unwarrantably confident exactness might be quoted. There are several palpable errors, due either to author, translator, or printer, in the volume. On page 70 it is stated that "corn may be grown at from 8s. 2d. to 8s. 4d. per acre"—bushel being no doubt meant; and on page 325 the consuming value of hay per ton is put at 1s. 5d. Such errors or misprints would be venial in some cases; but in a scientific work greater carelessness is expected. As to M. Ville's ungraciousness in failing to acknowledge sufficiently the work of other labourers in his field of inquiry, we need only refer to the fact that the field experiments of Messrs. Lawes and Gilbert are barely mentioned—only once we believe—and then without any particulars, although they were commenced, and their results were published, long before M. Ville began his experiments. This neglect is the more inexcusable because M. Ville's results in most respects strikingly confirm those obtained by his English contemporaries, showing amongst other things the superior economy and efficiency of chemical to farmyard manure.

With these warnings we may commend the book before us to the attention of students of science. The details of M. Ville's experiments, and his review of the experiments of Boissangault and others, are in many respects instructive and valuable.

One of the most interesting portions of the book is the preface to the French edition, which is given by the translator. M. Ville complains, with apparent reason, of French laws relating to land as impediments to agricultural prosperity and advancement, just as we complain here of some English laws. The French Law of Distress is similar to Scotch Hypothec, and is, of course, mischievous in its incidence. He also objects to an evil which is certainly not a feature of our English land system—the excessive sub-division of land. He advocates joint-stock farming, and advises farmers to co-operate in manufacturing their own manures.

On a future occasion we hope to publish a more detailed examination of M. Ville's scientific theories and experiments. We may mention now, however, that, after many inquiries, he came to the conclusion that the cost of producing farmyard manure in France is about 12s per ton. In stating this conclusion he gives some balance sheets of stock-feeding, none of which show a profit to the grazier apart from the manure. In conclusion, we may remark that the title of the book does not cover all its subjects, which include cattle-feeding, the manufacture of beetroot sugar, and other agricultural topics.

## OSTRICH FARMING IN SOUTH AFRICA.

Considerable attention has of late been drawn to the comparatively new industry at the Cape of farming domesticated ostriches. Up till about twenty years ago it does not appear to have occurred to anyone to make any attempt at domesticating the ostrich. Wild ones were to be met with by the traveller, dotted about in little groups in all the less-frequented inland plains; but, hunted and persecuted, it is not to be wondered at that ostriches would have ere long been entirely extirpated. About this time it occurred to Mr. Kinnear, a gentleman then resident at Beaufort-West in the colony, that it might be possible to domesticate the young of the wild birds, and that thus another valuable industry might be added to the colony's, at that time, somewhat limited resources. Beaufort-West being in the very heart of the country where the wild birds abounded, he was not long in obtaining a few young birds which had been run down only a day or two old. These were carefully tended and fed by him. When a few months old they were allowed to run on the lucerne fields about the homestead. They thrive and fully answered his most sanguine expectations. When eighteen months old, and every eight or ten months after, they yielded their beautiful crop of rich plumes. When three or four years old they began to breed, laying on an average fifteen or sixteen eggs, and bringing out about twelve or fourteen young; but so little notice did the matter attract that as late as 1865 there were only eighty domesticated ostriches in the whole colony.

From that time more attention was directed to the subject, and a demand arose for young birds, which increased in value from a few shillings each to ten and even fifteen pounds; so that by the year 1875, according to the census returns of that year, the domesticated birds had increased to twenty-eight thousand, and will no doubt by this time have reached fifty thousand at least. The feathers from these, together with some from wild ones beyond the boundary of the colony, realised last year, according to the Colonial Customs returns, little short of half a million sterling. The value of a pair of good breeding birds ranges now from £100 to £300, and even as much as £500 has been more than once given for pairs of good and regular breeding birds.

Ostrich farmers may be divided into two classes—first, those who buy the young birds from the breeders when from four to twelve months old, keep them for the sake of their feathers, and sell them as breeding birds when they have paired off and are of a proper age, say three or four years, for "breeders;" and secondly, those who give their attention to breeding birds only, selling the young as they are hatched, or when they are a few months old.

At four to six months old the young birds are worth at present about £15; at twelve months their chicken feathers are clipped. These are poor shabby things, the yield of each bird being worth no more than about thirty shillings. In about eight months, however, the first crop of good feathers is clipped, yielding, according to the quality and sex of the bird, from £5 to £12; and this is repeated every eight months with like result, till the bird takes to breeding, after which it is not desirable to deprive them of their feathers, as they require time to cover the eggs on the nest, and to regulate the heat during the process of incubation. Paired ostriches are generally placed in an enclosure, the larger the better, by themselves; where, in addition to the food growing there, they are, it needs any, supplied with additional food, such as mangel wurzel, lucerne, &c., or with some animal food and a good supply of bones, without which two last they do not thrive.

During the laying season the male is very savage, and will fearlessly attack any man or other animal coming within reach. One kick from his muscular leg has been known to kill a man. The hen lays an egg every other day, until there are from fifteen to eighteen in the nest, which is simply a shallow hollow scratched out of the ground, a sandy place being usually fixed upon for this purpose. Incubation takes six weeks, the male taking his turn to sit during the night and the female during the day.

Wonderful intelligence is shown by the birds in adjusting the amount of warmth necessary for the incubation of the eggs. During the night, early in the morning, and in the evening the body is raised full on the bulk of the eggs, the

outer ones being protected by the wing-feathers being spread over them. As the heat of the day increases the body is at first slightly lifted, and then more and more so, the bird resting on its haunches. At noon, if the heat is very great, the bird leaves the nest, and feeds close by till the heat moderates, when she resumes her task, the male bird relieving his mate at dark. From twelve to fifteen chicks are generally hatched. A few years ago artificial incubators were used, the eggs being removed from the nest as soon as laid. But it has been found better to allow the birds to hatch their own eggs. If properly fed on the nest as well as after the hatching, the ostrich will begin to lay again generally in three weeks or a month, and thus bring out three or four broods in a year. If the incubator is used there will be frequent failure from improper application of heat, and it is said that the young thus brought out are not so robust as those hatched naturally. The parent bird turns all the eggs in the nest very carefully once a day. The young birds are very delicate, requiring constant attention for some months, especially as they are very susceptible to cold and wet, and are subject to intestinal worms. A decoction of the root of the pomegranate is found to be the best cure for these pests.

There is a great difference in the feather-producing quality of ostriches, some yielding only three pounds' worth at a clipping, while others yield as much as fifteen pounds' worth.

It is surprising how very tame the domesticated birds become, except when breeding. They will allow you to approach them quite closely without being alarmed. They will take food from your hand and peck at the buttons of your coat. They will swallow food in pieces as large as oranges. The gullet passes spirally round their long necks, down which the pieces of food can be easily traced. The wild aloes and cactus leaves when cut up are very acceptable to them, and serve valuable medicinal purposes as well. In feeding they do not masticate, but strip the leaves and tender shoots of their favourite plants, and in like manner gather the grass-seeds.

The beautiful white plumes so highly prized by the ladies all over the world grow on the ends of the wings of the male birds. A good bird in his prime will yield from twenty to thirty of these, besides a few black feathers also from the wings. The tail feathers are not nearly so valuable or so beautiful. The hen also yields fine plumes from their wing-tips, but they are generally spotted and flicked with grey, and are called "feminines." Those which in the male bird are black are grey with her. From one hundred and twenty to one hundred and thirty good long feathers go to a pound; they are always sold by weight, and are all sent to the English market.—*Abridged from Chambers's Journal.*

## Cobent Garden Market.

THURSDAY, May 22.

The large consignments of Grapes from the Channel Islands are seriously affecting the values of English fruit, a better class of goods reaching us than hitherto. Business remains the same, with very little alteration to quote. A few good Peaches and Figs have made an appearance.

## FRUIT.

	s.	d.		s.	d.		s.	d.
Apples, ½ sieve	1	6	Oranges, per hundred	8	0			
Liberated Cobs, ½ lb	0	10	Pears, per dozen	0	0			
Grapes, ½ lb	0	10	Figs, gross, per bunch	0	4			
Lemons, ½ hundred	3	0	Strawberries, per lb.	6	0			

## VEGETABLES.

	s.	d.		s.	d.		s.	d.
Artichokes, English			Herbs, per bunch	0	3			
Globe, doz	3	0	Horseradish, ½ bund.	4	0			
Jerusalem, per b-b.	0	0	Lettuces, per mass.	1	0			
Asparagus, ½ bun.	0	0	Spinach, gross, per bunch	0	4			
Eng. per bun	0	0	Onions, ½ bushel	6	0			
Fr. giant, ½ bun.	0	10	Young, ½ bundle	0	4			
Tom. use, bun	1	6	Parsley, per lb.	1	0			
Sea-kale, ½ lb	0	0	Potatoes, gross, per lb.	3	6			
Broad, ½ lb	0	0	Potatoes, ½ bushel	0	6			
Beet, per dozen	1	0	New Jersey, per doz	3	0			
Cabbages, per dozen	1	0	Rhubarb, per bundle	0	8			
Cauliflowers, ½ bunch	2	6	Small, ½ lb.	0	6			
New Fr. per bun.	2	0	Spinnage, ½ lb.	0	6			
Garlic, ½ bundle	1	6	Spinnage, per bunch	3	6			
Chillies, per ½ lb.	2	0	Swet Potatoes, per lb.	0	6			
Cucumbers, each	0	8	Tomatoes, per dozen	2	6			
Endive, ½ lb.	1	6	Turnips, ½ bushel	3	0			
Garlic, per lb.	0	6	New Fr. per bun.	1	0			

Potatoes:—Old Potatoes getting scarce, and best sample advanced in price. Best 180s. to 180s.; Champions 100s. to 110s. Rocks, 90s. to 100s. New stuff from Malta, 12s. to 12s. Lisbons 10s. to 12s.; Jersey Kidneys 4d. to 5d. per lb.

## REVIEW OF THE CORN TRADE,

FROM THE MARK LANE EXPRESS FOR THE WEEK ENDING MAY 26.

The course of the past week has been marked by a more equable and spring-like temperature, and the improvement in the weather which set in some ten days ago has since made further progress. Warm, bright days, and an absence of frost at night, have done wonders in promoting the development of vegetation, which, unchecked by cold winds and favoured by sunshine, has made rapid progress. Although still bare for the time of the year, the natural beauties of the landscape are beginning to appear, and another week's seasonable weather will doubtless obliterate the most obvious traces of the long and weary winter; but, unfortunately, its less apparent though more injurious effects upon the growing cereal crops remain to be seen. In the sheltered districts of the home counties the appearance of the young wheat plant is neither so sickly nor so yellow as might have been anticipated, but the growth is undoubtedly very backward, so much so, that wheat ears will certainly be conspicuous by their absence this month. Recent agricultural advices from Norfolk and the ten counties are of a most discouraging character, an immense quantity of wheat having been ploughed in, and the land re-sown with spring corn. It is estimated that the yield of wheat in these districts will scarcely exceed half the average growth this year. Barley and oats have come up fairly well, but the recent night frosts have retarded their advance; still, a few warm showers, succeeded by sunshine, will go far to remedy this defect, and render future prospects more encouraging. The protracted winter and abnormal severity of the weather during the past two months has attracted the attention of scientists, and the opinion has been confidently expressed in some quarters that the summer of 1879 will be one of great heat and drought. The opinion appears to be based upon the presumed existence of a cycle of the seasons, extremes of temperature occurring at intervals of about eleven years, and is distinctly opposed to that which connects a disturbed equinoctial period, such as was experienced this year, with a variable and generally speaking wet summer. Of course, as a weather forecast, this must be taken for what it is worth, for even if the weather between this and harvest should prove droughty, it will probably be beneficial in many respects, as in this country the sun has seldom, if ever, spoilt the wheat crop, while the rain has done so frequently. Farmers continue to market their reserves of wheat very freely for the time of year at country markets, but business has been dull and buyers apathetic, so that the average price has suffered a further slight decline. A similar state of affairs has existed at Mark Lane, where the offerings have, however, been on quite a moderate scale, and previous prices have been maintained with difficulty. The imports of foreign wheat into London have been by no means

excessive, as last Monday's return showed little over 36,000 qrs., and the subsequent arrivals up to Friday have not exceeded 23,000 qrs. At the commencement of the week sellers showed considerable firmness, and to all appearances owners were content to warehouse their grain, and abide the future course of prices, rather than depress the market by forcing sales; but the return and subsequent continuance of fine weather, coupled with weaker reports from America, deprived the trade of its buoyancy, and sales were effected with difficulty at previous quotations. At the same time there seems to be sufficient inherent strength in the trade to prevent any marked decline taking place, as the continental demand strengthens the views of holders, and the visible supply in America is rapidly assuming less alarming proportions. No doubt the operations of continental buyers have to some extent counteracted the depressing influence of the weather, but it remains to be seen whether the demand will continue should agricultural advices at home and abroad become couched in more favourable terms. Business has not been without a certain degree of activity during the week, as the retail wants of millers have kept sellers employed, and the finer growths of spring American wheat have been in fair request. Maize has improved 6d. per qr. since Monday, and considerable quantities have changed hands at the advance, but other varieties of feeding corn have moved off quietly at former values. The sales of English wheat noted last week were 53,672 qrs. at 41s. 4d., against 35,554 qrs., at 51s. 2d. in the previous year. The London averages for the week ending May 23rd were 43s. 11d. on 2,264 qrs. The imports into the United Kingdom for the week ending May 17th were 443,911 cwts. of wheat, and 256,830 cwts. of flour. Business opened very steadily at Mark Lane on Monday last, and saw a further advance in the price of wheat was quoted in many of the principal country markets at the close of the previous week, factors commenced by asking 1s. per-qr. more money. The fine weather, however, made buyers cautious, and sales were impracticable at the advance; but the trade, nevertheless, ruled firm, and the day's sales indicated an improved demand at the extreme prices of the previous Monday. There were 6,167 qrs. of English wheat, and the supply fresh up on factors' stands was very moderate, but most of the samples were in fair condition. Fine lots moved off steadily, if somewhat slowly, and buyers had to pay fully former rates, while secondary sorts met with little inquiry. A quieter tone supervened at the close of the market, and in the brilliant sunshine which prevailed, the mischievous action of the previous inclement weather upon the growing crop appeared to be for the moment forgotten. The imports of foreign amounted to 36,657 qrs., about 25,000 qrs. of

which were from American Atlantic ports, and 7,257 qrs. from Germany, Russia and New Zealand furnishing the remainder of the supply. There was a full average attendance of millers, who bought with increased freedom, but mostly in retail, and in spite of the sunshine a steady consumptive demand was experienced at fully late rates, fine spring Americans being chiefly sought after. The exports were 1,904 qrs. against 1,028 qrs. in the preceding week. There were 963 qrs. of home-grown barley, and 4,246 qrs. of foreign. The demand was very limited, and quotations were unaltered for both malting and grinding descriptions. Maize, with arrivals amounting to 51,629 qrs. all of which was from America, met a more active sale, and 3d. per qr. more money was obtainable at the close of the market. The imports of oats were again liberal, in all 72,877 qrs., and the trade was somewhat depressed thereby, but a fair business was done on the whole, and sellers succeeded in establishing an advance of 3d. to 6d. per qr. on the week. There was no further arrival of English wheat on Wednesday, but about 18,000 qrs. of foreign wheat were reported. The weather again being very fine, quietude prevailed in the wheat trade, and a light retail inquiry was met at unaltered currencies. Mixed American maize was again the turn dearer, and 21s. per 480 lb. ex-ship was paid for sound new corn, but other feeding stuffs were without quotable variation. On Friday the supply had increased to 660 qrs. of English wheat, and 22,280 qrs. of foreign. The market was thinly attended, and the trade ruled very inanimate for wheat at nominally Monday's prices. There was no alteration in maize or barley, but oats were rather firmer. The imports of flour into the United Kingdom for the week ending May 17th, were 256,830 cwt. against 189,744 cwt. in the previous week. The receipts into London were 19,554 sacks of English, and 22,182 sacks and 1,585 barrels of foreign. A dull dragging sale has been experienced, as the continued heavy supplies have deprived the trade of animation, but in most instances buyers have had to pay last week's prices for both sacks and barrels. The week's arrivals of beans were 45,360 cwt., and of peas 26,333 cwt., showing an increase of 8,999 cwt. on the former, 12,265 cwt. on the latter. Beans have sold steadily at previous currencies, but peas have ruled dull, and a reduction of 1s. per qr. has been necessary to effect sales. The deliveries of malt were 14,860 qrs., and the exports 856 qrs. Prices have undergone no alteration, and the trade remains in a very quiet state, without any new feature to call for remark. As the sowing demand is now practically over, there has been but little activity in the agricultural seed trade during the past week; at the same time some little inquiry of a speculative character has shown itself for American red clover. Trefoil has also been in some request, and previous prices have been well maintained. Tares and grass seeds have met a limited sale at last week's prices, and mustard and rape are held firmly, but there has been little done in hemp or canary. The supplies of wheat at the principal country markets have again been on an unusually liberal scale for the time of year, but provincial trade has

been characterised by great steadiness, accompanied in some instances by a further advance in prices. A slight improvement has also been observable in the value of maize and oats. At Liverpool the market has been to some extent deprived of its recent buoyancy by the fine weather and quieter advices from America, and at Tuesday's market there was a poor demand for wheat at a decline of 1d. per cental on spring American descriptions. Flour sold slowly at previous prices, and oats, beans, and peas were quiet, but maize was taken pretty freely at 4s. 4d. per cental for new, and 4s. 6½d. for old mixed American. The week's imports included 51,000 qrs. of wheat, and 67,000 qrs. of maize. At Newcastle the wheat trade has ruled slow, and prices have slightly favoured buyers, but flour has supported previous rates, and feeding stuffs have maintained former currencies. At Hull and Leeds a moderate amount of business has been done in English and foreign wheat, and prices have undergone no change for spring corn. At Edinburgh the market has been liberally supplied with all articles except wheat, which has met a ready sale at fully late rates. Barley has also been in fair request but prices remain unaltered, and oats and beans have met a slow sale, without change in value. At Leith some improvement has taken place in the weather, and the growing crops, although still backward, look fairly healthy. The arrivals from abroad have been moderate of all articles, and at Wednesday's market Scotch wheat sold readily at full prices, but foreign was only in moderate demand and the turn easier. Flour showed some signs of hardening, and oats were in better request, but there was no change in barley, maize, or beans.

The following are the reports from Mark Lane during the past month :

Monday, May 5.

The arrivals during the past week have been : English Wheat, 5,030 qrs.; foreign, 36,961 qrs. Exports, 536 qrs. There was a good attendance at market this morning, but the change to more seasonable weather deprived the trade of much of its recent firmness. English Wheat was in short supply, and the turn lower; whilst foreign, of which the arrivals were fair, met a quiet consumptive demand at about late rates, for all except inferior American descriptions, which receded 6d. per qr. on the week, where sales were pressed ex ship.

Country Flour, 1,8246 sacks; foreign, 17,245 sacks 2,665 barrels. There was a slow sale for both sacks and barrels, but no quotable alteration was observable in prices.

English barley, 580 qrs.; Scotch, 404 qrs.; foreign, 5,842 qrs. Very little business was done either in malting or grinding sorts, but last Monday's currencies were, generally speaking, obtainable.

Malt : English, 16,055 qrs.; Scotch, 1,375 qrs.; exports, 2,090 qrs. The trade ruled quiet, and quotations underwent no change.

Maize, 42,397 qrs.; exports, 1,001 qrs. Sales were difficult to affect, and with large arrivals from abroad prices gave way 3d. to 6d. per qr. on the week for both old and new corn.

English Oats, 317 qrs.; Scotch, 365 qrs.; foreign, 59,385 qrs.; exports, 7 qrs. The trade was quiet, and with finer weather and increased imports sales progressed slowly at 3d. to 6d. per qr. less money.















